Clinical Lecture

ON A

PECULIAR FORM OF WRIST-DROP

FROM

PARALYSIS OF THE MUSCULO-SPIRAL NERVE IN FRACTURES OF THE HUMERUS.

Delivered at University College Hospital.

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GENTLEMEN,—Simple fractures of the long bones are seldom accompanied by any serious complications; the vessels and nerves of the limbs being so situated, and being so well protected by the interposition of a layer of muscle between them and the bones, as to escape being injured, in the vast majority of cases, by the ends of the fractured fragments. There are, however, two exceptions to this general rule: one in the upper, the other in the lower, extremity. In the upper extremity, in the relation of the musculo-spiral nerve to the shaft of the humerus; in the lower, in the position of the posterior tibial artery in reference to the upper end of the tibia. In both these instances the position of the nerve and of the vessel is such that it may be seriously injured by fracture of the contiguous long bone.

It is not my intention to-day to speak of the injuries that the posterior tibial artery may sustain in and from simple fractures of the bones of the leg; but I shall confine my observations wholly to lesions of the musculo-spiral nerve from fractures of the humerus.

The complication of an injury of the musculo-spiral nerve, in a case of simple fracture of the humerus, must certainly be of rare occurrence, as I find no mention made of it in the standard works on surgery that I have had an opportunity of consulting, and I do not recollect to have met with this accident until recently. We have, however, had lately three cases under our care here, in which, in consequence of injury to the musculo-spiral nerve or one of its branches, more or less complete paralysis of the muscles supplied by that nerve has resulted. These cases I will presently relate to you, and on them I will found the observations I have to make on this interesting subject.

When we observe the manner in which the musculo-spiral nerve winds closely round the back of the shaft of the humerus in its flattened groove, and how in its course downwards towards the forearm it comes into tolerably close relations to the outer condyle, we can easily understand how in fractures of the shaft the main trunk may be implicated, and in those of the condyle one or other of its chief divisions injured.

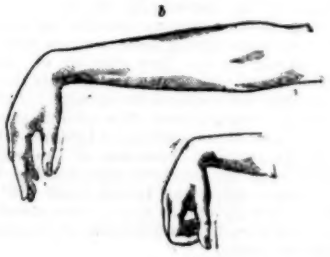
When the main trunk of the musculo-spiral nerve is injured to such an extent as to induce complete paralysis of it, both the supinators of the forearm and all the extensors of the wrist and fingers lose their power, and the patient becomes utterly incapable of performing those movements that are dependent on the action of these muscles. The hand consequently falls into a state of pronation and flexion presenting the characteristic signs of "wrist-drop."

When the posterior interosseous division of the musculo-spiral is the nerve that is injured, the loss of supination and of extension is not so complete. The supinator longus and extensor carpi radialis longior, being supplied by branches from the main trunk, are not paralysed, and thus a certain though very limited movement in the sense of supination and extension is preserved, although the forearm and hand fall naturally into a state of pronation and flexion.

These different conditions were well illustrated in the following three cases, which I will relate to you in the order of their degrees of extent and severity, so far as regards the paralysis of the various sets of muscles. An attentive study of the movements of the wrist, hand, and fingers in these cases throws a clear light on the actions of the muscles supplied by the musculo-spiral nerve and its branches, and some of the other nerves of the forearm and hand.

CASE 1. *Fracture of Shaft of Humerus; paralysis of trunk of musculo-spiral nerve, and complete loss of extension of the wrist, fingers, and thumb; loss, nearly complete, of supination.*—E. L——, aged twenty-nine, by occupation an ironer, admitted Dec. 16th. Ten weeks since the patient fell and fractured her humerus about the middle. She was treated as an out-patient, and the limb put upon an angular splint, so as to fix the elbow-joint. When the splint was left off, at the end of four weeks, she was directed not to use her arm for a week. She noticed wrist-drop when she left off the splint, but thought it was mere weakness. At the end of a week, however, on trying to use her hand, she found that she had no power in the wrist or fingers. It was thought to be weakness, and she bathed it with cold water. The hand has for some time felt much colder than the other. On examination, it is found that there is marked wrist-drop, with pronation. She cannot extend the hand at all. The right forearm, hand, and fingers are swollen. She feels a difference in the temperature of the two hands, but not so great as formerly. Occasionally she has a feeling of pins and needles all down the hand and fingers. The thumb and index-finger are numb on the dorsal aspect, especially the former. Sensation over them is imperfect. Flexion of the fingers is imperfect owing to stiffness of the knuckles. The temperature of the affected hand does not raise the index of clinical thermometer to 85°; that of the other is 90·6°. All the muscles supplied by the musculo-spiral nerve are paralysed completely. She has consequently totally lost all power of extending the wrist. She has no power of extending the thumb. She has no power of extending the fingers from the metacarpo-phalangeal joints; but when the fingers are completely flexed she can extend the joints between the first and second and second and third phalanges. This is evidently accomplished by means of the

FIG. 1.



interossei and lumbricales, which are attached to the expansion of the extensor tendons on the dorsum of the fingers lower down than the metacarpo-phalangeal joints. On holding the index-finger forcibly down, and telling her to try to extend it, the thumb is drawn in towards the palm by the attachment of the first dorsal interosseous to the metacarpal bone of the thumb. Supination can be performed apparently in a very feeble and imperfect manner, but only when the forearm is flexed. Flexion of wrist, hand, and fingers is perfect.

Since this report she has been galvanised by faradisation regularly, and has regained considerable power in all the affected muscles, so that she can now extend the wrist and the fingers from their metacarpo-phalangeal articulations.

There are several points in this case that deserve special attention. That the trunk of the musculo-spiral nerve was paralysed by being implicated in the fracture which occurred in that part of the humerus round which it winds, there can be no doubt. All the muscles connected with the hand and wrist that are supplied by both of the terminal divisions of that nerve—the radial and the posterior interosseous—were paralysed, and none other were affected.

Now let us examine a little more in detail the conditions of the hand and fingers. The wrist-joint was flexed, so that the hand hung listless and inactive, at nearly right angles with the forearm. (Fig. 1, *b*.) It could not be raised or extended in the slightest degree. No effort that the patient made in this direction was of any avail. There was, con-

sequently, complete paralysis of the two extensors of the wrist—the long and the short. The hand was prone; complete supination was impracticable, and no movement whatever in that direction could take place when the forearm was extended on the arm. But when the forearm was flexed, a slight supine movement could be made by the patient. To what was this due? Clearly not to the supinators, which would have acted equally well whatever the position of the elbow might have been. But apparently the slight effort at supination, for it was really nothing more, was the result of contraction of the biceps, which, as you are aware, when called into action whilst the hand is prone, has for its first effect a tendency to supinate the forearm and hand. There was, consequently, complete paralysis of the two true supinators—the long and the short. Thus there must have been loss of innervation in both the terminal branches of the musculo-spiral—the radial and the posterior interosseous. The long extensor of the fingers was paralysed, so that when they hung at right angles with the hand, they could not possibly be extended from the metacarpo-phalangeal articulations so as to be brought to a level with the dorsum of the hand. But there was one movement of extension still left to the fingers, and it was this—that when they were bent or drawn into the palm of the hand (Fig. 1, *a*), the last two phalanges could be extended, and with some little force, from the articulations between the first and second phalanges. Fig. 1 shows at *a* the fingers flexed, and at *b* extended from the first phalanges. Now this is an extremely interesting point, and one to which I would direct your close attention. To what is this upward or extending movement of the two terminal phalanges due?—a movement that takes place independently of the action of the true extensors of the fingers. It is due to the combined action of the interossei and lumbricales—muscles that do not receive their innervation from the musculo-spiral, but chiefly from the deep branch of the ulnar; all the interossei and the two innermost lumbricales receiving their nerves from this source, whilst the two outermost of the lumbricales obtain theirs from the median. Thus these accessory muscles of extension, receiving their nervous supply from sources that were uninjured, continued in the free exercise of their special actions. The thumb was drawn in towards the palm, and could not be abducted owing to the paralysis of the extensor muscle of the metacarpal bone. The numbness and referred sensations occupied those portions of integument that were supplied by the terminal branches of the radial nerve. The temperature of the hand was considerably lower than the other. It was below the lowest mark (85° F.) on the clinical thermometer; and as that of the sound hand was 90·6°, there must have been a difference of at least 5° to 6° F. between the two limbs.

The next case that I will relate to you is one in which the paralysis seems to have been limited to the posterior interosseous nerve. It is as follows:—

CASE 2. *Wrist-drop following Compound Fracture of the External Condyle of the Humerus; paralysis confined to the muscles supplied by the posterior interosseous nerve.*—H. E——, aged thirty, by occupation a lace-cleaner, on the 17th of November slipped down on her right elbow on the pavement, and afterwards came to the hospital. On examining the elbow, much mobility and crepitus were found, and a fracture of both condyles, with separation, could be clearly made out. At the back of the arm, about an inch above the elbow, was a wound which would take the tip of the little finger, clean cut without bruising of the edges, apparently done by protrusion of bone at the time of the fall. A probe could pass in different directions readily among the tissues. From Nov. 17th till Dec. 21st the limb was kept on an angular splint at the inner side, and the wound treated in strict accordance with Lister's rules for antiseptic dressing. On Nov. 24th (eighth day) there was much swelling, with some redness and tension, about the joint and upper half of the forearm. It was thought that fluctuation existed; and an incision, about three-quarters of an inch long, was made a little below the elbow. Much serous fluid came, but no pus. Large quantities of serous fluid continued to come from the wound for a fortnight afterwards. The tension rapidly disappeared; no pus was at any time observed. Passive motion was commenced on Dec. 21st. The splint was left off on Dec. 23rd. There was much stiffness of the joint.

Jan. 23rd. — Patient can bend the elbow to an angle of 45°; can straighten to about a right angle and a half. Can close the hand as far as to bring the tips of the fingers to about an inch from the palm; her hand can be made to close completely without much difficulty. There is perfect flexing and opposing power in the thumb. When the hand and forearm are supinated the wrist is quite straight. Cannot completely straighten the hand at the metacarpo-phalangeal joint. Very slight force brings these joints straight; but she cannot extend the fingers. When the hand and forearm are pronated there is a complete drop of the wrist. Cannot raise wrist or fingers. Cannot move the thumb outwards or backwards (through loss of power of the extensor). There is almost perfect power of supination when the elbow is fixed. When the fingers are completely flexed, she is able to extend the joints between the second and third and first and second phalanges, by means of the lumbricales and interossei. When doing so, as the hand is very thin, the interossei can be seen working. There is slight numbness on the back of the thumb and index finger, but no absolute loss of sensation.

Now this case closely resembled the last in all respects, with the sole exception of the paralysis of the hand and arm not being so complete. The general aspect of the limb was the same. The pronation and flexion of the forearm and wrist were marked; but the power of supination was not completely lost—in fact, existed to a considerable degree, but was not perfect. So also with regard to extension of the hand from the wrist. The knuckles could be brought up nearly to their proper level. Now this imperfect power of supination and of extension of the hand was doubtless due to the supinator longus and extensor carpi radialis longior—muscles supplied by the radial nerve—retaining their power, and thus being able to act; whilst the short supinator and the short extensor of the wrist, both supplied by the posterior interosseous nerve, were completely paralysed. Hence the imperfection of the supination and extension that existed. There was further proof of the fact of the radial nerve having continued to maintain its action in the fact that sensation was not lost in its terminal cutaneous branches. The temperature of the hand also had not fallen, as in the first case.

CASE 3. *Fracture of Lower Epiphysis of Humerus; wrist-drop from paralysis of posterior interosseous nerve; tonic contraction of flexors.* — M. M——, aged seven, was admitted as an out-patient under Mr. Heath, and by him transferred to Mr. Erichsen. In June, 1870, she fell over a croquet hoop, and the lower part of the right humerus was fractured. The arm was at first supposed by her friends to be dislocated, and a non-medical gentleman who was present pulled violently at it for some time, but, as he did no good, she was taken to a medical man. Splints were used for seven weeks; they reached to the tips of the fingers, which were kept extended. When the splints were left off the fingers became flexed at once. Her parents think they were more so than now. She can crochet with the right hand, and can write, but badly; she has been learning to write with the left hand in consequence. She has very marked wrist-drop; she can, however, easily extend her wrist. Her hand is pronated, and can only be imperfectly supinated. The fingers are flexed and drawn into the palm of the hand. (Fig. 2.) On the wrist being dropped, the last two

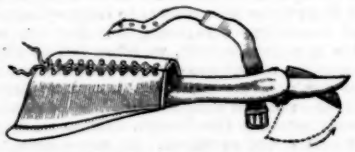
FIG. 2.

phalanges of the fingers can be imperfectly extended by the patient. On the wrist being straightened, the fingers become flexed, and cannot be extended actively or passively. On forcibly extending the fingers and wrist, there is no tension of the palmar fascia, but there is great tension of the flexor tendons above the wrist. The hand is congested and cold. The arm is distinctly smaller than the other. The temperature of the right palm is not high enough to move the index of the thermometer—so that it is below 85°, that of the left being 93·6°. The sensibility of the hands

was tested by the compasses; it seems quite as acute in the right as the left. There is some irregularity of the lower end of the outer condyle, which seems to have been the situation of the fracture, or separation of the epiphysis, which was the original injury.

Dec. 19th.—Mr. Erichsen ordered a splint to be specially constructed so as to permit of gradual extension of fingers by means of a movable hand-piece worked by a rack and pinion. (Fig. 3.)

FIG. 3.



Jan. 4th, 1871.—Mr. Erichsen ordered her arm to be faradised daily. There was at first scarcely any contractility perceptible in the extensors.

9th.—The splint has been applied, and the arm has been galvanised daily. The contractility of the extensors and supinators has markedly increased.

23rd.—The fingers have become sore from the pressure of the instrument. The index finger is but little improved. The middle finger is better, and the little and ring fingers are very greatly so, being now almost straight. The wrist can be extended perfectly, so that the knuckles can be brought to a level with the back of the forearm. When so extended, the fingers are half bent. But when the wrist is dropped they can be extended by the patient. In doing this they always involuntarily spread out in a fan-shape, owing to the action of the dorsal interossei.

It would appear that the chief resistance to proper extension was due to the contraction of the flexor carpi radialis and the flexor tendon of the index finger, both of which are very tense. Mr. Erichsen proposed to divide these subcutaneously; but the child's friends would not give their consent, and the patient was consequently discharged from the hospital.

In this case, also, we had the partial loss of supination and of extension dependent on paralysis of the posterior interosseous nerve; whilst those movements that were due to the interossei and lumbricales were perfect. The contraction of the flexors, which had become very marked, was apparently due to the loss of action of their antagonist muscles. It was most marked in the flexors towards the radial aspect of the forearm, and was also associated with a tonic pronation of the limb. The muscles thus injuriously affecting its movement had apparently undergone some rigid atrophy; and I regret that the child's friends would not allow tenotomy, as it offered a good prospect of cure. The fall in the temperature of the hand was very marked. It amounted to at least 8½° F., and how much more it was impossible to say, owing to the marking of the thermometer not admitting of a wider range being noted. But the difference between the two hands in this respect was most obvious and very sensible to the touch. This great fall in the temperature of the hand is very remarkable when we reflect that it was due to paralysis of a branch of the musculo-spiral which is not directly distributed to the hand; whilst the other nerves of the hand—the median and ulnar and cutaneous branch—were intact, and gave no evidence of paralysis. The movements of the muscles of the hand itself, and the sensibility of the skin covering it, were normal.

FROM the Annual Report of the Poor-law Commissioners for Ireland for the year 1870, it appears that the average daily number of persons receiving relief in workhouses was 47,910; in 1864, the average was 55,000; and that the number of inmates of workhouses on the 18th of February last was less by 4227 than the number at the corresponding date in the preceding year, and less by 6963 than that in 1868. On the other hand there has been an increase in the proportion of those receiving out-door relief, from 21,326 last year to 23,544; but the Commissioners regard this as affording no true indication of the condition of the country, the only reliable test being the number of inmates in the workhouses.

Clinical Lecture
ON
FUNCTIONAL MEDICINE.

Delivered March 5th, 1870.

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GENTLEMEN,—The advances of medical science during the present century have tended to produce, and indeed have produced, an estrangement between the scientific cultivators and the simple practitioners of medicine. Principally in two ways. Minute investigation into diseased structures and a dispassionate study of the action of drugs have shown that advanced changes of structure are but little influenced by so-called remedies. Hence a scepticism as to the value of drugs pervades the profession, more especially the more scientific portion of it. Some, indeed, who have probably no superiors in the art of diagnosis, have absolutely ceased to place any confidence whatsoever in drugs. This disbelief in drugs is supported also by another fact. It has been found that many cases of those classes of disease which are not necessarily fatal recover without any medicines whatever. The student is thus perplexed and puzzled. This perplexity is increased when you find in standard works of the highest authority that you are recommended to adopt methods of treatment which, as an actual fact, are, justly or unjustly, discarded by all practitioners. For example, you are told in Lectures on the Practice of Physic to bleed persons suffering from certain acute inflammations. It is true you are told only to do so in suitable cases. But when you discover, both by inquiry and observation, that no one nowadays meets with any cases that are suitable, you are not unnaturally bewildered, and, indeed, cannot be accused of disrespectful indocility if you come to look upon the practice of medicine as fudge.

This tendency to undervalue the art is apt to degenerate into disregard for the science when the student seems to see that even those who still have some faith both in the art and in the science apparently do not harmonise the two. For example: you see a physician examine a patient's chest, and pronounce him to have bronchitis. He then very properly proceeds to examine the heart, immediately stating that it is unsound, but hesitating to decide whether this unsoundness causes constriction of the mitral orifice, or, on the contrary, undue patency of it. At last, possibly with the assistance of the sphygmograph, he decides in favour of one or the other, as the case may be. The urine is then examined, and albumen is immediately detected; but then comes a doubt, to be settled only by other minute investigation, whether the kidney is merely positively congested, or whether it is organically diseased. This point settled, the temperature chart is inspected, and the prescription dictated. It is observed that this is an ordinary expectorant mixture, which he knows by the experience of the out-patient room is exactly the same which would have been ordered had the examination ceased at the first stage—that is, when the bronchitis had been discovered.

The general effect of such an experience as this upon the student is, that he attaches a great deal more importance to physical diagnosis, which seems to be an end in itself, than to treatment. In hospital practice the relief of the patient's sufferings is not incumbent upon the student. But when he comes to have a patient of his own, and begins to feel that his bread and cheese hang upon the success of his treatment; that upon this it depends whether this patient will continue to employ him, and will recommend other patients to him, a new light breaks in upon him. He ceases to undervalue the importance of symptoms; and, indeed, rapidly falls into the opposite extreme. My personal and professional intercourse with the most successful practitioners of medicine justifies the statement that a large proportion of them will tell you plainly they treat sym-

ptoms. My own observation tells me that another large proportion of them act upon the same principle, though they may not have the courage to avow it, or perhaps have not sufficiently analysed their motives to explain them. When I have said that these persons are successful practitioners, and that they are numerous, I cannot deny, if I would, that a principle which is year after year rediscovered by so many persons each for himself, acting without concert, must necessarily embody a great truth. I make not the slightest doubt that it does. At the same time it leaves other great truths out in the cold. It is one of the justest objections to the homœopathic system that, in recommending the treatment of symptoms, it ignores any necessity for determining the origin and cause of those symptoms. This objection cannot be fairly urged by a very large section of orthodox practitioners. At the same time I know that this section does not limit itself to the treatment of symptoms so exclusively as it professes to do. Still the tendency of this method is unquestionably to depreciate scientific medicine in both branches of diagnosis and pathology. I seek for no further proof of this than in my own knowledge of the practitioners to whom I have referred—many of them men of undoubted ability and industry, some of whom I know to have been, as many others probably were, diligent students, both in hospitals and schools; yet, after years of practice, probably less able to make an accurate physical diagnosis or to discuss any abstract pathological question than when they first commenced practice.

This dissociation between science and art, which prevents so many who would be competent to advance the science from even approximately keeping up with the advances of others, is a thing much to be deplored. A state of things which leads highly scientific physicians to ignore treatment, and accomplished practitioners to despise science, cannot fail to be painful to every thoughtful lover of his profession.

In practical medicine, as in morals, it is well to have a lofty ideal. If we aim at a high mark we shall shoot higher than if we aimed at a low one. But in both there is a danger in having too lofty an ideal. We feel so utterly unable to reach that which we profess to ourselves we ought to reach that we do not long continue to aim at it. This is the case with many young practitioners of medicine. They set out impressed with the advantages of minute investigation, of accurate research, and of exhaustive diagnosis by those various means and instruments which they see used in hospitals. They find afterwards, when pressed by the cares and fatigue of a large practice, that they are almost compelled to forego their use; they find also that in many cases they get on pretty well without them, and thus fall into the habit of neglecting them, even in those cases where their use is, for purely practical reasons, imperative. They thus in course of time dissociate themselves from scientific medicine, which they come at last to despise. That this conclusion is actually arrived at by a large number of practitioners, many of whom do not hesitate to avow it, I appeal to the experience of everyone; and I think I am not wrong in the genesis to which I have attributed it. I have long been convinced that this state of things cannot be rectified by the earnest and genuine exhortations of teachers. If it could have been, it would never have existed. It is the result of too high an ideal and the inexorable logic of circumstances.

The ideas or principles which may, I think, eventually lead to an alteration of this unsatisfactory condition may be summed up in the term "Functional Medicine." In explanation of this term, and of the ideas involved in it, I request your attention to the following considerations. What I mean by it is this: that whenever we come to treat a case, to prescribe drugs or particular diets, rest or action, we should first of all consider what function of the body it is that is improperly performed. To the setting right of that function we should address ourselves. It may be, and indeed generally is, the case that more than one function is (it may be several are) astray. We have, then, further to consider whether it is possible or convenient to attempt to rectify all these at once; and, if not, we have to decide which we should begin with.

Now this method has several recommendations. Amongst the first is, that it is not too high an ideal to be constantly aimed at. In a large number of cases it is closely allied to the principle which, as I have told you, many persons act upon—namely, the treatment of symptoms. Because every symptom of disease arises from the imperfect discharge of some function by its appropriate organ. Hence it requires only a slightly higher order of thought than that which is commonly in vogue. Indeed, many persons who profess only to treat symptoms do rather aim at the treatment of function. They misdescribe their principles, and so do themselves an injustice. Now, though this admission may indicate that the principle I am laying down is comparatively wanting in novelty, it is strong testimony to its practical utility. Practice would be much more imperfect than it is if all those who profess to treat symptoms really contented themselves with doing so. For this reason: if we treat a symptom merely, we often fail to remove that which causes the symptom. To give an extreme instance: If a man has a thorn in his hand, and we merely order opiates for the relief of the pain thus produced, we are very inadequately treating the disease, though we may be adequately treating the symptom. In some cases treatment based upon such a principle may actually aggravate the disease. You will remember that in my last lecture, which was upon certain urinary deposits, I pointed out to you that lithiuria sometimes produces impotency; and I mentioned to you that persons thus suffering, in whom the cause of the disorder had not been recognised, may, and are advised to, take tonics and live freely, both of which, and particularly the latter, have a direct tendency to aggravate the lithiuria, and so to increase the disorder they were intended to cure. Treatment of this kind is directed to the symptom—impotence,—because in some such cases depending upon other causes this treatment may be beneficial. If, then, every person who now professes to proceed upon the plan of treating symptoms would in each case profess to proceed upon the plan of treating functions, there would be a great gain to practical medicine. Miscarriages of treatment of the class I have pointed out—and they are very numerous indeed—would be avoided. Further, this principle would bridge over the lamentable chasm which now divides the science and art of medicine. Accomplished pathologists and morbid anatomists, whose true knowledge of disease has justly led them to recognise the incurability of many organic diseases, would enhance the benefits they have conferred on mankind if they would condescend to rectify those functions of which the apparatus is not totally disorganised, and thus much misery would be averted, and many lives eased and prolonged. On the other hand, those who find by experience the limited control which we can exercise even over functions, and the extreme difficulty with which they can in some instances be influenced, would gladly hail any assistance which science might afford them by its most recondite researches, when these throw any light upon the laws which govern the growth of cells, the distribution of the blood, or other mysterious acts upon which the discharge of function depends.

Another advantage is this: persons who got as far as I suggest would get further. It is impossible that any of you who have paid attention to cases in the hospital, and have watched or assisted in their investigation, can have failed to be struck by the fact that one and the same disorder of a particular function may in different cases arise from very different causes. Take, for example, epileptic fits. You have doubtless seen them, in the surgical wards, caused by external injury; in the medical wards, you have seen them dependent upon the presence of worms in one case, upon disorder of the stomach in another case, and upon other causes in other cases. Now, knowing this, and resolving to treat not merely a symptom, which in the case of epilepsy is usually done by a miscellany of reputed specifics, you would naturally be led to examine into the case closely, and discover, if you could, the function which was permanently disordered, and the cure of which disorder (often lying very deeply hidden) would cure the more apparent and prominent phenomena, of which only the patient complains. Many cases of epilepsy may in this way be relieved. And remember this, that any specific must influence some function, though we may not know what function is disordered, still less the organ by which it is performed. In illustration of this, take the case of potassic iodide and secondary syphilis. A man has syphilis, and some time afterwards skin eruption, or sore-throat, or falling of the hair, or painful swellings, or enlarged glands, or albuminuria, or anæmia, or iritis, or dry pleurisy, or simple

cachexia, or a combination of these symptoms. We give him potassic iodide. The symptoms disappear, and there is no evidence that his health is not as perfect as in his pre-syphilitic period. Twelvemonths after, some of these symptoms return. What do we infer from this? We assume that these symptoms arise from a poison in the system. If so, there must be some organ which manufactures this poison, and for a season ceased to do so; or else there must have been some organ which for a period ejected the poison from the system, and which after a time ceased to do so: some organ, therefore, the peculiar function of which is deranged. What this organ is we know not—still less in what way its healthy action is modified. But the effect of the iodic salt has undoubtedly been to restore that function to its normal condition. So you see that Functional Medicine perfectly well admits of the employment of such a specific, though the discovery of its powers may have been purely accidental and its *methodus medendi* be still unknown. Examples of the alteration of one function by the disorder of another might be multiplied almost infinitely. Take bronchitis only. Upon what an immense variety of causes, direct and indirect, may it not depend. Its treatment may or may not be influenced by our knowledge of its distant origin. It does not at all follow of necessity that the physician who treats it with simple expectorants, after, by minute inquiries, discovering many complications, is in error, though you may have thought so from my remarks in an early portion of this lecture. You see now that, in my opinion, Functional Medicine incorporates all the benefits of the imperfect method of symptom-treatment, and moreover leads directly on to the recognition and employment of the most precise, searching, minute, and scientific methods.

Another great recommendation of Functional Medicine, in my eyes, is, that it explains the necessity, and thereby justifies the use, of empirical* plans and remedies. I will explain what I mean by empiricism. We seek to modify the function of the kidney. We have but a limited insight into the working of this organ; we know that it consists of certain parts, and we know to some extent the working of these parts. But we know very imperfectly. We find that in a state of health the quantity of the urinary secretion may be increased in numberless ways. When we come to use some of these means in a case of dropsy, where hyperuresis would be useful, they totally fail. We cannot tell why this is. Or we find that one amongst many succeeds. We can no more tell why this is. We only know the fact. Empiricism recognises this imperfection of our knowledge; and it also tells us how best to counteract it. Do not persist in the use of a drug which does no good, or even possibly does harm, because, judging from some data or others, we have come to the conclusion that it *ought* to do good; on the other hand, do not cast aside drugs or methods which seem to do good, or have done good, in apparently similar cases, because, judging from some data or others, they ought not to do good. Many proofs might be given that such a warning as this, superfluous as it may appear, is not really so. I will give but one. Dr. Bright, who was the chief discoverer of the diseases which go by his name, was in the habit of using diuretics in the treatment of them. I have always done so, and in many cases with signal success. Yet, in spite of this teaching by empiricism, their use has been strongly deprecated, because, judging by certain microscopical appearances, diuretics ought to be injurious. In treating a case of Bright's disease, I try to restore the function which is most seriously disordered. I find that in many cases, not in all, the only way to restore this function to something like its proper performance is to use diuretics.

Functional Medicine leads on a little further in another direction. It leads us to anticipate disease, and so to forestall the enemy. Thus we find that in the course of certain diseases there is special liability to interference with some particular function, as in the case of the kidneys in diphtheria. Precautions may in this instance be readily taken which, though perhaps not infallibly, will probably prevent the functions of the kidneys being seriously interrupted, and thus we may prevent the very dangerous consequences which this interruption entails. We can similarly prevent scarlatinal dropsy.

Functional Medicine also justifies, and may therefore restore, some old and wise practices which have been submerged under the advancing wave of modern science. When it was not well recognised that many diseases tended naturally to cure themselves, methods were adopted for their relief which are now disused, not because they have been proved to be wrong in practice, but because they became unnecessary in theory. For example, the use of a sharp calomel purge at the outset of the exanthemata, once universal, is now rarely resorted to; yet the beneficial effects of this plan in ordinary cases need not be insisted on to those who in their own proper persons have been so treated. But where we find, from our knowledge of the natural history of a disease, that there is a tendency to pernicious diarrhœa, as in typhoid, then we should either refrain from such treatment or use it with extreme caution. This is another example of anticipation in Functional Medicine. Speaking of typhoid calls to my mind another example of the justification of an old treatment by Functional Medicine. I have never seen any more decided benefit produced by any treatment than I have seen, years ago in the Paris hospitals, from the application of leeches or cupping over the cæcum in certain cases of typhoid. Yet typhoid is a disease of debility, and we are urged nowadays in cases of debility to ignore all special functions and "restore" the patient. How, then, are we to explain the success of this anomalous treatment? Very simply. The cupping restored the function of that part of the mucous membrane the disorder of which, in the particular cases referred to, had aggravated the general disorder of the system. In the weakest patient it is often better to restore a function the irregularity of which is keeping the patient back, than to try to force them into strength by stuffing them with food and tonics and stimulants. How often do we see an enfeebled and disordered stomach thus overburdened and exasperated, instead of soothed by appropriate diet and quieting medicines.

The last consideration which I shall offer you as evidence of the propriety of the ideas which I have summed up in the term Functional Medicine may not be at first sight one of great practical weight. It is, nevertheless, in my estimation, anything but trivial. It is that this principle of action is in harmony with the latest and highest conceptions of philosophical medicine. To you who have probably not been much accustomed to abstract or metaphysical considerations, I may perhaps find a little difficulty in conveying my meaning. I will, however, try to do so in a plain and simple manner. What is disease? What do we mean by the term? In old times people used to think that a disease was some actual entity or thing which had got into the body in some way, and was there lying hidden and secreted, and was to be cast out. We know that there are a few instances of this kind of thing. For example, we know that some disorders depend upon the presence of a tapeworm in the intestines, and that to cure them we must hunt the worm out of the body. This idea, which we now know to be true only in a few specific instances, was at one time general. The germ of this idea still runs through a great many of our conceptions of the nature of disease. This is more particularly the case in the pathological conceptions of ill-educated laymen. But many traces of it are still to be found amongst ourselves also. It is not long since the most illustrious and philosophical of existing pathologists has been dealing with this question; and the conclusion he has come to is that all disease is disordered function. Here, then, I say, is the highest justification for all treatment being based upon the principle of restoring disordered functions to order, and this it is which I have ventured to term Functional Medicine.

And now, gentlemen, one word of explanation and apology. It may have appeared to you that it is not quite fair to subject you to a lecture upon abstract principles, when you are invited to hear a clinical lecture. What, really, is a clinical lecture? It is a lecture upon points observed at the bedside of one patient, which you may usefully remember the first time you get by yourselves by the bedside of a similar case. Well, you cannot much complain if, instead of that, I give you ideas drawn from bedside observation of every case I have ever seen, and which you may usefully remember, as I sincerely hope you will, at the bedside of every patient whom you may ever see.

* Having been the first physician who of late years has publicly avowed approval of empirical treatment, it has been a source of much satisfaction to me to find myself followed by so distinguished a teacher as Dr. Wilks. Not the less so because his authority has challenged an attention to the subject, which mine did not. I still think, as I have said elsewhere, that empiricism is not the highest possible art, but it is often the highest art possible.

ON THE ORIGIN OF CANCER.

BY CAMPBELL DE MORGAN, F.R.S.,
SURGEON TO THE MIDDLESEX HOSPITAL.

WHAT is the origin of Cancer? Does the disease consist solely in a local change of structure; or is it the local determination of a general morbid condition of the blood; or are the blood and the tissue equally interested in its formation?

Few questions in pathology are of greater interest and importance. On the answer we are prepared to give to them depends the practice we should be prepared to follow. On their true solution depends the probable success of that practice. It is not until they are correctly answered that we can rationally approach the more important question, Is cancer curable?—and if so, through what channel, and by what agency? There is little doubt that the answer given by the large majority of pathologists would be, that the blood is the primary seat of cancer. There would be, perhaps, less of positiveness, certainly less of unanimity, on this point than there was some years since, when it was universally taught that cancer was essentially a blood disease, manifesting itself in a part, much as an inflamed toe is supposed to come on from a gouty state of the blood. If this is not now so universally held, yet still the majority would maintain that there must be a special condition of the blood antecedent to the appearance of a cancerous growth.

It would be strange if a disease which holds its own with such a terrible grasp, in spite of all efforts to tear it away, were not regarded as having an origin far deeper in the system than a fatty or an adenoid tumour. Its constitutional origin seems to be firmly established by the *commune sensus* of our predecessors, and by the indisputable facts which daily pass under our own eyes, and these facts are strong. The Horatian dictum with regard to the self-assertion of Nature herself will apply to cancer—remove it, cut it or burn it out, but it will spring up again. Such is the general and sad experience of all surgeons. Happily cases do sometimes occur which show that the rule, though general, is by no means universal. Patients from whom cancer has been removed have lived for many years and died of other disease, no trace of cancer having shown itself in the intermediate time. But this, as the believers in the doctrine of blood-poisoning very justly say, is no proof, even in the individual case, since we often find that a patient remains after operation to all appearance absolutely free from the disease, and that, years after perhaps, fresh tumours become developed. Or it may be said, again, that the blood-taint, though originally present, may have become exhausted at the time the tumour was removed.

Then, again, we have evidence that cancer is very often hereditary. Mr. Paget traces hereditary tendency in one out of every four cases; Mr. Sibley, from the cancer records of the Middlesex Hospital, in one in every nine. It is not improbable that the hereditary tendency may be more common still. We get more evidence of it from private than from hospital patients, the latter as a rule knowing less of their remote family history than the former, and our averages are made up largely from hospital records.

Another and a very common event in the history of cancer, and which seems to lend countenance to the view that cancer proceeds from some general cause, is the outburst of tumours in various parts of the body, in any or all tissues; brain, muscle, liver, kidney, bone, lung, heart—all may be found the seat of cancerous deposit, and of necessity, so far as we can judge, in some cases of nearly, if not entirely, simultaneous deposit. But this event is usually of a secondary nature: a single tumour has existed, and probably has existed for some time, before this general outburst of the disease has declared itself. The fact would be startling, and would appear to confirm the opinion of those who hold cancer to be a blood disease, even if it stood alone. If it could be shown that cancer breaks out primarily in this multiple form, without any antecedent solitary deposit, this opinion would be still further strengthened. Such cases are, however, not to be found; or, if they have existed, are so extremely rare that they prove nothing with regard to the causes of the disease.

Evidence of the constitutional nature of the disease has been sought in the assumed fact that cancer is found in families of consumptive tendency. It is, on the other hand, however, admitted that cancer and tubercle, though not antagonistic, rarely co-exist in the same individual.

Lastly, we have the evidence of the general contamination of the whole system—the wasting, the peculiar cachexia, the disorganisation of the digestive system; and these not, perhaps, always dependent upon the deposit of the disease in vital organs, nor on excessive discharge, but apparently either on some vitiation of the blood and the tissues, or on defective or perverted assimilating power of the stomach. Dr. Fenwick has shown that, in the later stages at least, the mucous membrane of the stomach is diseased.

It is not surprising, then, that surgeons have come to regard cancer as from the first a constitutional or blood disease. Indeed, it is no easy matter to account for all that we observe in cancer without adopting some such view. But, on the other hand, there are many facts which oppose themselves to it, and there are other modes of accounting for some of those characters which most strongly support it. I do not think that the importance of the question is in general so fully realised as it should be. Some, indeed, seem to consider that, practically, the question is not worth discussing. Yet, surely, if cancer be a constitutional disease, we must strive to find some corrective to the constitutional taint. And we should try in that case to determine whether the local disease is the result of some error in the organising or nutrient function of the tissues, or whether it is the actual deposit of some poison previously existing in the blood.* If the former, our aim must be to find out the source of this error; if the latter, to learn the nature of the poison, and to be able to detect it. Then we might have a reasonable hope of being able to do, what has as yet proved beyond our reach—viz., to cure or even to modify cancer by general treatment. But if cancer be, at any period of its existence, a purely local disease, we should hope that by earlier and more complete removal better and more generally permanent results may be obtainable than we can at present boast of.

Admitting fully the difficulties which lie in the way of arriving at a perfectly satisfactory conclusion, and notwithstanding the high authority of those who adhere to the more commonly received opinion, I may state that the more I consider the question, the more do I hold to the view which has been so ably advocated by my late colleague, Mr. Moore, and which is maintained by many in this country, and by Virchow and many German pathologists. That there may be a constitutional tendency to cancer I fully admit, but that it is in any sense to be regarded as a blood disease seems to me to require stronger evidence than we have yet obtained. I should say that cancer and allied diseases partake more of the nature of parasitic disease than of the results of previous blood-poison. The final destiny of such tumour will depend, not on any special chemical or nutrient element, but on the nature of the growth itself. This seems the view taken by Mr. Huxley. In his presidential address to the Association for the Advancement of Science (1870), he says, speaking of xenogenesis, "It is only in pathology that we find any approximation to true xenogenesis; and it is furnished by the various structures in which, under the influence of certain external conditions, elements of the body which should have developed in due subordination to its general plan, set up for themselves, and apply the nourishment they receive to their own purposes. From such innocent productions as corns and warts there are all gradations to more serious tumours, and in the terrible structures known as cancers, the new growth has acquired powers of reproduction and multiplication, and is only distinguished by form from the parasite worm, the life of which is neither more nor less closely bound up with that of the infested organism."

To a certain extent—to a great extent indeed—I admit a constitutional tendency to this disease; but I admit equally a constitutional tendency to warts, or to fatty and other

* "For the present I will only say that I think malignant tumours are local manifestations of some specific morbid states of the blood, and that in them are incorporated peculiar morbid materials, which accumulate in the blood, and which their growth may tend to increase."—Paget, Lectures on Pathology, p. 393.

simple tumours. I cannot suppose that there is any material in the body which must work itself out of it, and which selects this situation or that indiscriminately, or perhaps makes use of one in preference to another from finding a tissue better prepared for its reception. I cannot suppose that there are various kinds of this morbid material—one breaking out as scirrhus, another as epithelioma, &c. If the cancer poison be of one kind only, we should surely find it more frequently appearing in the same subject at one time as encephaloid, at another as scirrhus, at another as epithelioma, or some other form of malignant disease. Yet this is seldom the case, though it does occur. I quite admit that the nature of a cancer will be modified by the character of tissue in which it appears, and by the general activity of the tissues. We may find this in gout, or rheumatism, or syphilis. But the sufferer from either of these diseases will be liable to attacks of it at different times in every possible form, or in many forms at once, and this we do not so often find in cancer. Other general or blood disease, as the exanthemata, will produce structural change only in certain tissues. Now, however mild and however limited the local manifestations of any recognised blood disease may be, we find evidence of a general affection of the system as well. We cannot say as much for cancer.

Before entering further into the question, it will be desirable to settle what is to be included under the terms "cancer" and "malignant." Here we have at once wide divergencies in the opinions of pathologists. Paget says, "The chief distinctions [of malignant tumours] are to be traced in certain characters which in the malignant tumours or cancers (for these terms are synonymous) are superadded to those already cited as belonging to the whole class"—i.e., of tumours. This again raises the question, What is malignancy? This is well laid down by Paget as presenting six characteristics, more or less prominent, and more or less divergent from any found in innocent tumours. They are—

1. Dissimilarity in structure from natural tissue.
2. Tendency to infiltrate the structures around them.
3. Tendency to softening and ulceration.
4. The indisposition of the ulcer to heal, and the continual formation round the ulcer of new morbid material, which goes through similar changes.
5. Not only enlargement of original tumours, but tendency to multiply and propagate themselves.
6. That in their multiplication and ulceration there is scarcely a tissue or organ which they may not invade.

But while thus defining malignancy, Mr. Paget would limit the application of that term to cancer. Assuming, however, that these are the signs of malignancy, we cannot absolutely limit that term to what are generally recognised as cancers; but we must, I believe, include such diseases as cystic sarcoma, enchondroma, fibroma, lymphoma, &c., which, as we shall see, *may* present all the characters here laid down. Mr. Paget, it is true, while not prepared to admit that these growths are truly malignant (unless in those cases where true cancerous structure is mixed up with that of the tumours), yet cites cases in which, he allows, there are characters of malignancy which should make us cautious.

The view generally accepted is that the term "cancer" should be restricted to tumours having in common one special character, in addition to those above enumerated. This character is the presence in greater or less abundance of ununiform cells with large nuclei, having no cohesion with one another, and, indeed, for the most part floating freely in a clear fluid in the alveoli of a fibrous stroma. This is the view taken generally by Virchow and his school, and by the majority of the Pathological Society. These authorities, however, admit the malignant nature, the infecting power, the dissemination, the tendency to recurrence, &c., of other forms of tumours, calling them malignant sarcoma, malignant enchondroma, &c. This is not a mere matter of definition of terms; on the contrary, it is one on which depends, to a great degree, the solution of the question—Is cancer a blood disease?

Although I shall use the term cancer in its ordinary acceptation, I may here state that I do not regard this disease as essentially distinct from other recurrent and infiltrating growths. I mean that I do not suppose that there is any difference in the albumen and the gelatine and the blood of one or other of these; that there is no special *materies morbi*, but a difference of arrangement only—a difference of more or less. The reason why cancer shows so much more of the nature of malignancy than other forms of tumour may be found perhaps in the simple fact that the elements which compose it are so much more free from cohesion, so much less organised; and that they are not, for the most part, separated from the tissues in which they lie by any limitary membrane, but grow at the expense of these tissues. Thus the free unadherent germs of growth can readily be taken up by the absorbents or bloodvessels or loose connective tissue spaces of the parts in which they are growing. We shall see that this takes place in regard to structures far more compact than cancer.

(To be continued.)

ON ACUPRESSURE.

BY WILLIAM PIRRIE, F.R.S.E.,
PROFESSOR OF SURGERY IN THE UNIVERSITY OF ABERDEEN.

ACUPRESSURE may be defined to be the arrest of surgical hæmorrhage by a method the principle of which is metallic compression, removable at pleasure. For this discovery we are indebted to the genius of that marvellously gifted man, whose lamented death I deeply mourn, the late Sir James Y. Simpson, who, I believe, thought correctly when he said, "The invention of acupressure will one day do more for my fame than even the discovery of chloroform."

Being perfectly convinced that acupressure only requires a fair and skilful trial to ensure its general adoption—believing, as I most firmly do, that the employment of this method of arresting hæmorrhage is the greatest single improvement in modern times in the treatment of incised wounds, and having doubled my experience of this admirable proceeding since I last wrote on the subject, I am anxious to be allowed space in the columns of THE LANCET to describe, as briefly and as clearly as may be in my power, the best methods of acupressure, and to state my decided convictions regarding its merits. I am the more anxious to do so as imperfect knowledge of the best methods of acupressing vessels, and complete misconception regarding the proper manner of performing some of them, have led to failure and other untoward results. These untoward results, and the circumstance that obsolete modes are alone described in the last editions of otherwise excellent works on surgery, have all tended to retard the more general adoption of this new means of arresting surgical hæmorrhage.

At former periods in the history of acupressure it was deemed desirable to describe seven methods then in use; but the constant study of acupressure, both in hospital and private practice, has thoroughly convinced me that *three* methods only are required, and that by one or other of these every vessel which it is possible to reach by ligature may be effectually secured by acupressure.

At my last interview with Sir James Y. Simpson I stated my belief that the more general adoption of acupressure would be greatly accelerated by its friends recommending *three* methods *only*, and by their agreeing to distinguish them, not by the *old* numbers, which would be no longer applicable, but by a *new* nomenclature. Sir J. Y. Simpson highly approved of these proposals, and on the following day sent for consideration the names hereafter mentioned.

MODES OF ACUPRESSURE.

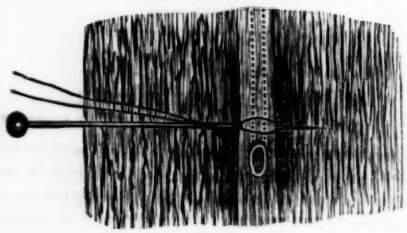
Three modes only of acupressure are required, and it was resolved by the late Sir James Y. Simpson and myself to designate them by the names of Circumclusion, Torsoclusion, and Retroclusion. In arresting hæmorrhage by circumclusion, an acupressure pin and a loop of inelastic iron wire are employed, whereas for the performance both of torsoclusion and retroclusion a pin only is required.

I prefer the pins suggested by myself to any others; and those who are desirous of using them will have no difficulty in obtaining them, and the proper kind of inelastic iron wire, from Messrs. Weiss, Strand, or from Messrs. Coxeter, Grafton-street East, London.

Circumclusion.—As the metal goes round the vessel, this mode of arresting hæmorrhage is called circumclusion. It consists in entering a pin in the tissues a line or two to one

side of the artery to be circumcluded; pushing it behind, and causing its point to emerge a little beyond the vessel; passing a loop of inelastic iron wire over the point of the pin, bringing the wire over the track of the artery and behind the stem of the pin, drawing it sufficiently tight to close the vessel, which is proved by the arrest of bleeding, and fixing it by a single twist around the pin. This description and a glance at the accompanying illustration will make the mode of performing circumclusion sufficiently clear, and the *rationale* of its operation in arresting hæmorrhage perfectly intelligible.

FIG. 1.



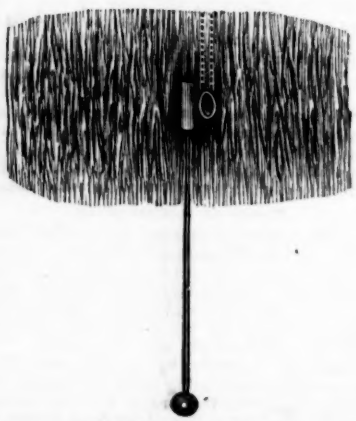
Circumclusion.

In my experience of acupressure, no fact has struck me more than the slight degree of pressure required for the perfect arrest of circulation through an artery, provided the pressure be direct and continuous. In performing circumclusion, it is important to have this fact impressed upon the mind, so that unnecessary and injurious constriction may be avoided. Of all methods of acupressure this is the best. It is perfectly reliable, it is most generally applicable, it may be performed in an amazingly short time, and, like the other methods in ordinary circumstances, without the aid of any assistant. When an artery is situated in a confined corner of a wound, or when cut short in a perpendicular surface, by taking hold of the mouth of the vessel with an artery forceps, and drawing it out very gently, the passing of the pin below, and the loop above, the artery will be greatly facilitated. When the artery is to be relieved from acupressure, the head of the pin should be gently twirled, and, having thus been rendered loose, may be pulled out with the greatest ease without causing any pain; after which the loop, being liberated, can be readily withdrawn.

Torsoclusion. — Torsoclusion, formerly described by me under the name of the Aberdeen method, or the method by the twist, requires for its performance a pin only, and consists of two steps.

In the first step, the pin is inserted in the tissues pretty

FIG. 2.

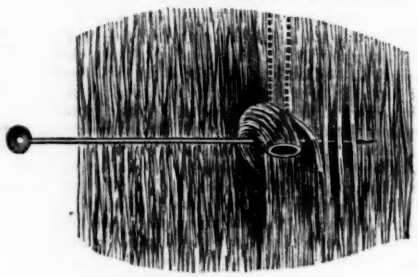


First step of Torsoclusion.

close to the mouth of the bleeding artery; it is then pressed onwards in a direction parallel to that of the vessel; and its point is caused to emerge to the extent of several lines, when the parts will present the appearance delineated in Fig. 2.

The second step consists in giving a quarter rotation to the pin, so as to place its emerged extremity above and at right angles to the artery; in pressing it well down against the small portion of tissue between the instrument and the vessel; and in sending the point for some distance into the tissues beyond the artery, for the purpose of securing the pin in position and of maintaining the twist: when the parts will present the appearance shown in Fig. 3. The

FIG. 3.



Second step of Torsoclusion.

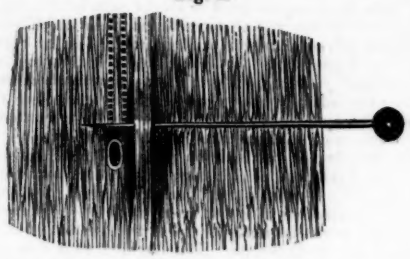
artery is to a certain extent twisted, as well as steadily compressed, and in that way, no doubt, the occlusion of the vessel and the suppression of the hæmorrhage are effected.

Of all methods of acupressure, that by torsoclusion as now described is the simplest, the easiest, the quickest, and, it has the indispensable recommendation of being perfectly efficient. In reference to the advantages of this method, I beg to be allowed to quote from my own writings. "Simplicity, efficiency, quickness, and ease of performance, are unquestionably great recommendations; but this method possesses two other advantages, of the greatest importance for obtaining either immediate union or union by primary adhesion: the one, that there can be but little molecular injury or straining of tissues; and the other, that, by the gentlest twirl and traction, the pin can be easily withdrawn, with extremely little, if any, discomfort to the patient. Surgeons who know how little produces pain in an amputation wound, how slight a degree of pain is apt to cause involuntary contraction of muscles in the stump, how certain such contractions are to separate parts of the internal surfaces of the wound from each other, although by retentive means its edges are kept in apposition, and who, after the greatest anxiety to obtain the best results, have so often, in a few days, witnessed the disheartening effects of such contractions, will fully appreciate the value of a means of arresting hæmorrhage which, at the moment deemed judicious, can be removed, not only without pain, but almost without discomfort to the patient."

The first time the femoral artery was secured by this method was by myself, in an amputation of the thigh, in the Aberdeen Hospital, in June, 1864; when those present were exceedingly gratified with the great simplicity of the method, as well as the facility with which it could be employed. Since that time it has been employed in an immense number of cases, by the late Dr. Keith, by Dr. Fiddes, and myself; and it is to be hoped that our united testimony in favour of this admirable mode of arresting hæmorrhage may induce surgeons of other hospitals to give it a fair trial.

Retroclusion—so named in consequence of the pin passing ultimately behind the artery—is a convenient mode of securing vessels of small or very moderate size, and, like torsoclusion, consists of two steps, and, like that method of acupressure, requires a pin only for its performance. In the first step, the pin is entered in the muscular tissue, a little to one side of the artery, held almost flat upon the wound, caused to emerge, and passed in front and a little beyond the track of the vessel, as shown in Fig. 4. It should be particularly observed that, in this movement, only a few muscular fasciculi are raised upon the pin, and that it is caused to emerge from the tissues before being sent across the track of the artery.

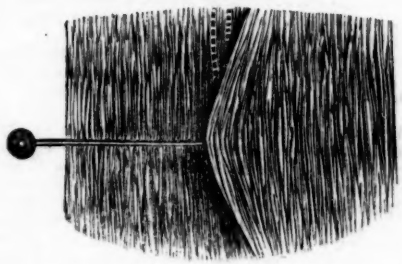
Fig. 4.



First step of Retroclusion.

In the second step, the head of the pin is made to describe the greater part of a semicircle, so as to be placed nearly flat on the opposite side of the wound; its point is then sent behind the artery, in the contrary direction to

Fig. 5.



Second step of Retroclusion.

that in which it passed in the first movement, and pressed on until it is fixed in the tissues beyond the vessel, when the parts will present the appearance delineated in Fig. 5.

(To be concluded.)

ON THE EXCLUSION OF LIGHT IN THE TREATMENT OF SMALL-POX.

By W. H. BARLOW, M.D.,

HONORARY MEDICAL OFFICER OF THE GENERAL HOSPITAL AND DISPENSARY FOR SICK CHILDREN, MANCHESTER.

SINCE the publication of a paper by Dr. Black, of Chesterfield, in THE LANCET of June 29th, 1867, upon "A Mode of preventing the Pitting in Small-pox," I have habitually followed the plan therein advocated of excluding the light and administering arsenic; and, until very recently, I have believed this to be the best mode of treating all varieties of this formidable disease. There can be no doubt (and the testimony of all who have followed out this plan will, I think, be unanimous upon this point) that the exclusion of light exerts a retarding influence upon the progress of the pustules in their later stages, so that, instead of acuminating in the usual way, they shrink and shrivel about the sixth or seventh day of the eruption. The effect of this retardation is, in most cases, to prevent that amount of pitting and destruction which is due to the changes brought about in the subjacent tissues by their later progress. That much of this pitting is really due to the effects of the stimulus of light, or, at least, of some of the rays, seems pretty well shown by an experiment recorded in THE LANCET of August 24th, 1867, where part of the face of a small-pox patient was covered with a warm solution of coloured gelatine (to exclude the actinic rays), the rest of the features being left exposed to the full action of the light, with the result of showing a marked contrast between the two portions. This result also agrees with our knowledge of the effects of light upon the growth and circulation in both animal and vegetable structures. The much-ridiculed red curtains, within which John of Gaddesden enclosed his royal patient, were, therefore, not without their excuse; nor, on the other hand, were his successors wrong in rejecting them. Free ventilation is an essential in the treatment of small-pox, and it is in no way incompatible with the entire exclusion of light. The use of arsenic I do not think of very great importance. I have treated cases without any drug other than the acetate of ammonia, and they have done quite as well as those who have taken the arsenic; and during the past four years I have not had one patient badly marked, or left with any injury to the eyes. These cases have been numerous, and have included many unmodified and several confluent; and until just recently I have hailed a case of small-pox with pleasure, so sure have I felt of securing a satisfactory result. But during this present epidemic I have lost four cases of confluent small-pox under circumstances which have raised in my mind certain doubts as to the advisability of this plan of treatment in all cases; for, whether it be from the greater activity of the *materies morbi*, or merely from its greater abundance, this, like most other zymotic diseases, seems most virulent during the height of its epidemic period, and the unmodified cases are mostly confluent and very severe. Now so great is the effect of the exclusion of light upon the maturation of the pustules, and so rapid in these four cases was the sinking and death, just at the period when the pustules would under the stimulus of light have acuminated and ripened, that I have been led to believe that there might exist between them the relation of cause and effect, and that the patients have sunk overpowered by the virulence of the poison, which has, by the abstraction of the accustomed stimulus, been prevented from taking its natural course to the skin, in the same way as death may occur from the suppression of the exanthem of scarlatina or measles.

The first case was that of a young man, twenty-four years of age, who when first seen was covered with papules exactly resembling an eruption of measles; but the disease being recognised by the other diagnostic signs, the dark treatment was immediately adopted. He was a strong, muscular man, and seemed to be going on as well as possible till the evening of the seventh day (of the eruption); there was comparatively little fever, pulse rarely over 100, little delirium, and he took nourishment freely. On the evening of the seventh day he felt himself sinking, the pustules seemed pale and shrunken, and he died in the early morning of the eighth day.

The second case was that of a little girl, seven years of age, unvaccinated, with a confluent eruption on the face and neck, and very close though discrete upon the body. She died on the evening of the seventh day of the eruption, in an exactly similar manner.

In the third case, the patient, a man of forty-five, with a confluent eruption over most of the body, complained much of the absence of light, and said it was "killing" him. He sank and died with the same symptoms on the evening of the seventh day.

The last case was that of a young man of twenty-seven or twenty-eight, who also died on the morning of the seventh day.

In all these cases the death was from sudden collapse; the pulse very little altered in quickness, but weak; the surface pale and shrunken; and stimulants seemed to have no effect. Now, although deaths of this kind are by no means unfrequent in severe small-pox, even when exposed to the full effects of the daylight, yet it would be but seldom that four cases so exactly similar would occur, as these did, almost consecutively; and the shrinking of the pustules, which in these cases preceded death, so exactly corresponded with that observed in the cases which did well, and which was there looked upon as the desired effect of the exclusion from light, that my mind is irresistibly impelled to attribute it to that cause, and these deaths to its consequences,—just as in those cases where, from some other cause, the progress of the eruption is checked, though the patients have been left exposed to the ordinary influences. It is not my intention to discourage my brethren from the careful and judicious use of a measure which I believe to exercise a powerful control over the course of the external manifestations of this disease, but to call attention to the necessity of exercising care and judgment in the cases to which it is applied, as otherwise it may become, like other

powerful and, in proper hands, useful means, if used rashly or injudiciously, an injury instead of a benefit.

It is probable, but it as yet remains to be proven, that as the actinic rays are, if not wholly, at least chiefly, concerned in producing the peculiar effects of light upon growth and vegetation, so their exclusion would perhaps have the desired result of retarding the development of the pustules without so completely arresting their progress as total darkness, and that the other rays might be sufficient to avoid that depressing effect upon the mind which seems to me to have much to do with the fatal result.

In the meantime, however, the clear deduction from these thoughts is, that though this mode of treatment is very useful in the lighter cases of unmodified, and in all cases of modified small-pox, yet it should be used with great caution in the graver cases of a confluent character; for we must not forget that the outward manifestations do not form the whole of the disease, and that, grave as may be the consequences of their unchecked career, there are more serious forces behind, for which these form the outlets, and as it were the safety-valves of the system.

Manchester, June, 1871.

A CASE OF INDUCTION OF PREMATURE LABOUR,

IN AN INDIVIDUAL WHO HAD BEEN DELIVERED NINE MONTHS PREVIOUSLY BY GASTROTOMY, AFTER RUPTURE OF UTERUS AND ESCAPE OF CHILD INTO ABDOMINAL CAVITY.

BY J. H. TYLECOTE, M.D. &c.

IT may be in the recollection of some of the readers of THE LANCET that on Nov. 5th, 1870, I reported a successful case of "Gastrotomy after Rupture of the Uterus and Escape of the Child into the Abdominal Cavity." I am now, through the kindness of Mr. Hopkins, of Stone, who ably managed the case, in a position to give an account of a subsequent parturition in the same individual, which, though less fortunate in its results than the previous one, is not the less interesting, inasmuch as it renders the history of the case more complete.

On March 8th, 1871, Esther N——, the woman above referred to, called upon me, after walking a distance of more than four miles, to consult me as to her approaching confinement, which she expected to take place about the end of April or middle of May. She stated that she had only menstruated once since her confinement in June of last year, when gastrotomy had to be performed in consequence of the escape of the child into the abdominal cavity through a rent in the uterine walls. Her general health since that time had been extremely good, and all she complained of was "a feeling of aching and soreness at the bottom of the womb."

In a conversation on the case with Mr. Hopkins a short time previously, it was decided that the induction of labour between the seventh and eighth months was desirable; as affording to the mother a fairer prospect of recovery, and to the child a greater probability of being born alive, than if gestation were allowed to proceed to the full term. For, by adopting the proposed course, not only would extreme distension of the uterus be avoided, but less resistance would be offered by the immature fœtus, and the risk of prolonged and violent uterine action would be thereby diminished.

Our reasons for proposing the induction of premature labour having been explained to the patient, she agreed to submit to the necessary treatment.

On March 13th, therefore, Mr. Hopkins commenced operations by Dr. Tyler Smith's method, of the alternate injection into the vagina of warm and cold water four times daily. The preference was given to this particular plan over the many other methods that have been recommended for the purpose, as being most likely to soften and relax the vagina, os, and cervix uteri, and thus facilitate the passage of the child with the least expenditure of uterine effort.

March 16th.—I saw the patient with Mr. Hopkins. The douche had been continued during the preceding three days. She had experienced a slight pain in the back the day before. There was a muco-sanguineous discharge, and the vagina felt soft, sodden, and relaxed; the os uteri admitted the finger to the first joint, and the lips and cervix were soft and yielding. Examination externally found the abdomen exceedingly pendulous, and the cicatrices resulting from the operation performed at her previous confinement were well marked and of a brown colour. That showing the line of the incision measured nine inches and a half in length, and at this part the parietes were thin and yielding. The movements of the child could be felt with the hand placed on the abdomen, and the sounds of the fœtal heart were distinctly heard in the left iliac fossa with the aid of the stethoscope. We decided that the douche should be continued for another day, when, if labour had not made any further progress, the membranes should be ruptured with a catheter. The abdomen was directed to be supported with a flannel binder, and the patient to lie on her back in the semi-erect posture, in which position delivery was, if possible, to be effected, with the view of avoiding obliquity of the uterus, and thereby diminishing the risk of irregular pressure. For this valuable suggestion I am indebted to Dr. J. Braxton Hicks, whose able opinion on the case I consulted, and who kindly gave me many useful hints as to its management.

18th.—I received the following report from Mr. Hopkins: "I am glad to tell you that our patient was delivered this morning about 1 A.M., but the child was stillborn. I continued the employment of the douche until 6.30 P.M. of yesterday, and about two hours after she sent to say that pains had commenced soon after I had left the house. On visiting her, I found the os well dilated, and pains regular. The presentation could not be detected until the membranes were ruptured, when Dr. Fernie felt a hand. The child was turned, and soon born. After the expulsion of the placenta there was very great hæmorrhage, which we had much trouble in arresting, and for some time feared for the poor woman, who was greatly exhausted. She has, however, now rallied, and is going on satisfactorily."

19th.—Was going on favourably at the morning visit; but during the day got up and went down stairs, notwithstanding the strictest injunction that she was not so much as to raise her head from the pillow. This imprudent act produced a slight recurrence of the hæmorrhage; whereupon she returned to bed, and died on the sixth day after delivery, with symptoms of increasing exhaustion—such as blanched and pinched countenance, rapid feeble pulse, clammy perspirations, and some tympanites, which however disappeared before death. There was some secretion of milk, and the lochiæ were natural. She had neither rigors, heat of skin, nor abdominal pain or tenderness.

An autopsy could not be procured, notwithstanding that the priest's influence was brought to bear upon the husband. The precise cause of death, and the actual condition of the parts consequent on the rupture of the uterus nine months previously, must therefore remain matters of conjecture.

Sandon, Stone, May 10th, 1871.

THE EFFECTS OF CHLORAL HYDRATE.

BY ROBERT MUNRO, M.A., M.B., M.C. EDIN.

CHLORAL HYDRATE has been introduced to the medical profession under the very highest possible recommendation, and I believe it will permanently take its place among those drugs that have really benefited suffering humanity. It is, indeed, in its way, a triumph to scientific medicine; for it had been announced, from the nature of its composition, that it should produce those soporific effects which experience has now shown it to possess. Under these circumstances it is only natural to expect that it would be lauded as the panacea for all the ills that flesh is heir to, and that it should be largely used before attention would be drawn to its deleterious effects.

Having observed several cases recorded in THE LANCET in which its administration proved injurious, and even

fatal, and especially the article by Dr. Browne on its inconveniences and dangers, I was in hopes that, the attention of the profession being thus drawn to it, many more would be published illustrative of its effects. It is only by a large comparison of the results of independent observers that its real value can be determined, and, what is more important, its danger avoided. I think it is of the utmost importance that a new medicine should be thoroughly known in all its phases before being used indiscriminately by the public, especially when fraught with so much danger as chloral will be found to be. I am not unfrequently asked by my patients to prescribe this "*new* medicine" to them; and I sometimes find a difficulty in dissuading them from the use of it in diseases in which I know, from previous trial, its effects to be injurious.

My experience of the use of chloral hydrate, as indicated in the annexed cases, has led me to the following conclusions:—

First: It is of great benefit in cases of mental excitement and functional disturbance of the nervous system, when there is no organic disease of the brain.

Second: It is injurious in cases of protracted and great debility, more especially if the body is reduced by unnatural discharges.

Third: Its long-continued use, even in small doses, is injurious in any circumstances whatever.

CASES.—1. Mrs. ——, suffering from malignant disease of the liver and jaundice, was in the habit of taking a draught with a little morphia at bedtime, which usually did very well. At the request of Professor ——, who was called in consultation, I tried chloral. A draught containing twenty-eight grains was given at 10 P.M. Two hours afterwards I was summoned to see her, when I found her restless, much excited, with a quick pulse, and no tendency to sleep. I then ordered the usual draught of morphia, and she soon fell asleep. I continued the chloral for three nights consecutively, gradually increasing the dose; but each night the same result followed, so I discontinued it altogether.

2. A young man suffering from insanity, with great excitement and sleeplessness, caused by too much mental work, fell asleep after the administration of a half-drachm dose. This treatment was continued for three nights with the same good result, when he was removed to an asylum. He was quite well in about two months.

3. In two cases of chorea it produced sound and refreshing sleep, and was only required for a few nights.

4. In four cases of delirium tremens it acted as a charm in half-drachm doses, repeated every two hours, till sleep ensued. Usually one or two doses were sufficient, but in one case, a strong, stout, vascular man, with great mental excitement, and a bounding pulse, I had to repeat the dose a third time, after which he slept for thirteen hours. The second night only two doses were required, when he slept soundly the whole night. On the third day after the drug was administered he was perfectly well.

5. In a case of pelvic cellulitis, about a week after the abscess was evacuated, on two trials it was followed by so much restlessness, sleeplessness, giddiness, and discomfort, that the patient positively declined to take it any longer.

6. In several cases of phthisis in which I have seen it used, sooner or later it produced unfavourable symptoms. In one case, after it was used for about a week, the patient became delirious; in another, that of a young lady who had used it for about ten days, the tongue and gums became red and spongy. When I saw her, just two hours after she had taken her dose of chloral, she was listless, stupid, and bathed with a cold, clammy perspiration, and her pulse 130, though previous to taking her draught it was only 90.

7. For the sleeplessness due to age I made trial of it in three patients, all upwards of eighty years of age, and in one only was it effective. In this case a gentleman, in his ninetieth year, took it for several months in ten-grain doses at bedtime. By-and-by he became so giddy, helpless, and muddled in his ideas, that I ordered it to be discontinued, and, as he was for many years in the habit of taking some soothing draught, I prescribed fifteen drops of chlorodyne in an ounce of fluid magnesia. In about a week after this change the above symptoms were all nearly gone.

Kilmarnock, June, 1871.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CASES UNDER THE CARE OF DR. JOHN MURRAY.

THERE are at present some cases of interest under the care of Dr. John Murray in the out-patient department of the Middlesex Hospital, of which we subjoin short notes.

Advanced Paralysis Agitans. — The subject of the disease was a man sixty-two years of age and a bootmaker, who had suffered from this affection for seven years, previously to which time he had invariably enjoyed excellent health. He had not been the subject of gonorrhœa or syphilis, and had been in every way a temperate man. The symptoms were very marked, the muscles of his extremities being constantly in motion. His speech was much affected, his utterance being almost unintelligible. His progression was characteristic of an advanced stage of the disease, presenting as he did the appearance of falling forwards, which he would actually have done had he not occasionally broken into a shuffling trot. While standing his gait was awkward, his body and arms hanging forward. Dr. Murray concurred in the belief that these cases are probably always due to chronic connective tissue changes in the cord, as described by Dr. Cayley, and to a considerable extent amenable to treatment. In the present case the man had been under care for several months, and had been chiefly treated on cod-liver oil and carbonate of iron, during which time the symptoms were, if anything, less marked. The patient had gained flesh, and his general health was greatly improved.

Erysipelas excited by Croton Oil.—A peculiar effect of croton oil was presented in a child and her mother. The child slept with the right side of her head on the chest of her mother, who was at the time suffering from chronic bronchitis, and had applied croton-oil liniment to her chest before going to bed. In the morning the left side of the child's face was red and much swelled, the eyelids being completely closed. The mother's face was also slightly affected. There was no constitutional disturbance in either. The affection retired from both patients in twenty-four hours. It ought to be mentioned that they were both taking a mixture containing squills and ipecacuanha for bronchitis.

Treatment of Diabetes by Lactic Acid. — Dr. Murray has several patients suffering from diabetes, whom he is treating with lactic acid, as recommended by Professor Cantani of Naples. They have all greatly improved, but, as the diet has been restricted in the meantime, he is unable to say as yet to what extent the lactic acid deserves the credit. When the sugar entirely disappears, the patients will be gradually allowed to resume their diet, when the practical value of lactic acid will be tested.

Suppurating Scrofulous Glands of the Neck treated by Drainage.—Two patients (children) are attending with scrofula and enlarged cervical glands. In both patients one of the glands had suppurated. Instead of making an incision, Dr. Murray had passed a catgut ligature through the abscess, the contents of which were then allowed to drain away. The glands had quite recovered in one case, and nearly so in the other. No scar was left in either case —a matter of considerable importance, especially in the case of females.

Petit Mal.—An example of this form of epilepsy presented itself in a boy thirteen years of age, who came to the out-patient room with an abrasion on the right temple, a consequence of one of his attacks. His physiognomy and the shape of his head were epileptic, but no family history was obtained from his mother of nervous diseases of any kind. On the other hand, he was seemingly very intelli-

gent. His mother, indeed, gave a glowing account of his intellectual capacity, and his handicraft as a painter and birdstuffer. He had suffered from the first attack about a year ago, three days after a fright caused by his boots having been stolen. Ever since that time they have occurred two or more times daily, increasing gradually in frequency. During the last week he has had fifteen to twenty during the twenty-four hours. The attack comes on with a feeling of numbness in the first phalanx of the middle finger of the left hand, which is followed about half a minute afterwards by a feeling of giddiness, when he at once completely loses his senses. The hand and fingers, and they only, are violently extended, and remain so for a period never exceeding three minutes. But frequently the hand becomes affected without any loss of consciousness, the attack presenting thus the characters of the "abortive" epilepsy of Marshall Hall. Strange to say, notwithstanding the frequency of these attacks, no impairment of the mental power is visible, and the hand retains its muscular strength intact so far as a comparison with the right hand can be held to indicate. The boy's general health is good. Dr. Murray, with the view of testing the value in this case of a ligature placed on the proximal side of the part at which the aura epileptica is felt, directed the boy to keep a ligature loosely on his wrist, and to tighten it immediately he felt the aura. At the same time seven-grain doses of iodide of potassium were ordered three times a day.

MOORFIELDS OPHTHALMIC HOSPITAL.

A CASE OF OPAQUE OPTIC NERVE-FIBRES.

(Under the care of Mr. SOELBERG WELLS.)

WE are indebted to Mr. Charles Gosse for the notes of the following case:—

W. B——, aged forty-nine, applied for relief, suffering from slight conjunctivitis and symptoms of presbyopia. On ophthalmoscopic examination it was found that both eyes presented a striking example of opaque optic nerve-fibres, an appearance which is occasionally mistaken for an inflammatory condition of the optic nerve and surrounding retina. On examining the left eye with the ophthalmoscope, in the reverse image, there is seen at the lower and outer half of the optic disc a considerable white figure, in size about half the diameter of the disc. Its peripheral termination is not ill defined, so that it passes over gradually into normal retina; nor is it surrounded by a faint opacity, or studded with little dots, but it is distinctly striated and feathery, terminating abruptly in the perfectly normal and transparent retina. Its central margin encroaches somewhat on the expanse of the optic disc, which has consequently at this point lost its normal transparency. The rest of the disc is, however, perfectly clear and transparent, and its outline sharply and regularly defined. The retinal vessels are quite normal in colour and size, both on the disc and in the retina. The arteries and veins which run downwards lie in a portion of retina internal to the opaque optic nerve-fibres, so that they can be traced distinctly over the white figure, and are not at all covered or hidden by it; whereas this is not the case with two vessels which run in an outward and downward direction, for these are here and there almost entirely hidden by the white patch. In the right eye the appearances are very similar, the opacity occupying likewise the lower and outer portion of the disc, but only very slightly encroaching on the expanse of the latter. In neither eye did there exist any separate opaque patches at a distance from the central figure. The sight of both eyes (the presbyopia having been corrected by suitable glasses) is perfect, and the field of vision quite normal. In each eye the "blind spot" is considerably enlarged in a downward direction, which corresponds to the situation of the opaque nerve-fibres at the upper margin of the disc.

Clinical Remarks by Mr. Wells.—The peculiar white patches at the edge of the optic disc are due to the fact that the nerve-fibres have retained their medullary sheath (white substance of Schwann) at this point, and are therefore opaque; whereas, in the human subject, they generally lose their medullary sheath at the cribriform tissue, and pass on to the anterior part of the disc and from thence to the retina as transparent axis cylinders. There are certain marked and characteristic differences in the ophthalmoscopic appearances presented by opaque optic nerve-fibres and those observed in neuro-retinitis, which enable us at once to distinguish between these two conditions. In the former there is an entire absence of all signs of inflammation of the optic nerve and retina; for the disc, excepting of course at the points where the nerve-fibres are opaque, is clear, transparent, and of a normal tint, and its outline sharply defined. The white striated patches lie close against the disc, or extend even on to its expanse, and at these points, therefore, it loses its sharply cut margin. The peripheral termination of the patches is irregular, and in the form of fine feathery striæ, like the minute tongues of a flame, which extend for a short distance into the retina. It is a point of special importance that the latter is perfectly normal and transparent in the immediate vicinity of the patches. Moreover, although the retinal vessels may be here and there entirely covered or partially hidden by the opacity, they are quite normal in colour and calibre, and present no signs of over-fulness or tortuosity. If, however, the opaque optic nerve-fibres lie on a plane external to the vessels, the latter will pass over the patches without being at all hidden or interrupted in their course. In some cases we find that one or more little white isolated patches appear on the retina at some distance from the disc, being separated from it by perfectly transparent retina. It is just these cases that are most apt to mislead the observer with regard to the diagnosis, as it appears so extremely improbable that the optic nerve-fibres should lose their medullary sheath near the disc, become transparent axis cylinders, and then resume their sheath for a short distance. Hence he may easily be misled into considering such isolated patches to be due to inflammatory changes in the retina. But that they really depend upon opaque nerve-fibres has been proved by the dissections of Recklingshausen.* Another point of distinction between these cases and those of neuro-retinitis is that the sight and the field of vision are perfect. The blind spot (the blank patch in the field of vision which corresponds to the optic nerve entrance) is enlarged if the area of opaque optic nerve-fibres around the disc is considerable. In the above case the blind spot in each eye was markedly increased in size in a direction corresponding to the position of the opaque fibres.

KING'S COLLEGE HOSPITAL.

ATTEMPTED REMOVAL OF A RECURRENT TUMOUR IN FRONT OF THE KNEE; AMPUTATION OF THE THIGH.

(By Mr. WOOD.)

THE second tumour in this situation had been removed between three and four years after the first operation; the third, after an interval of two years; the growth now to be dealt with had reached its present proportions after an interval of a little more than one year. It was situated in front of the knee-joint, and presented a red, granulating surface, about three inches in diameter, surrounded by a raised and irregular margin, which was covered by integument on its outer aspect. In the attempt to dissect it off, the knife first exposed the internal lateral ligament of the joint, and next the synovial membrane, and it became evident that any further attempt would interfere most seriously with the integrity of the joint. Removal of the limb was therefore decided on; this was performed at the lower third of the thigh by oblique transfixion, and the formation of half lateral, half antero-posterior flaps, of which the anterior was a long one and the posterior correspondingly short. Mr. Wood claimed for this proceeding that, in addition to removing the cicatrix far back, and bringing under the bearing-point of the bone a strong piece of the hard skin of the anterior aspect of the thigh, it secured, during the process of healing, a good depending opening which would prevent any accumulation of discharges. He added that he had preferred to give his patient the better chance of recovering from the amputation by operating as low as possible, because, unlike the case of a more decidedly cancerous growth, there was little likelihood of a slowly growing fibroid reappearing in a flap taken from the neighbourhood of a former growth.

* Virchow's Archiv, vol. x., 1864.

PROVINCIAL HOSPITAL REPORTS.

BRADFORD INFIRMARY.

EXTENSIVE DEPOSIT OF LYMPH ON SEROUS MEMBRANE IN NINETEEN HOURS.

(Under the care of Mr. MEADE.)

THE following report has been communicated by Dr. Rabagliati, house-surgeon.

A boy, aged six years, sustained the following injuries by the fall on him of a large flagstone, which was standing on its edge:—A compound fracture of the left leg; a simple, extracapsular fracture of the neck of the femur on the same side, and a simple fracture of the right femur about the middle. He had an ecchymosis over the right eye, and was bleeding from the left ear; there was no change in the pupils; the child could answer questions rationally, and complained of pain, but was rather drowsy. Death took place nineteen hours after the occurrence of the accident.

On post-mortem examination there was found a comminuted fracture of the frontal bone about the right orbit. The fracture extended across the orbital plate on the same side, raising it out of its place, and causing pressure on the under surface of the frontal lobe; the membranes were considerably congested. Extending over nearly the whole surface of the brain was an abundant thick deposit of organised lymph, which was most abundant over the optic commissure. It united together firmly the two halves of the cerebrum, spreading across the longitudinal fissure, especially in front. The same was the case in the Sylvian fissure, the bands spreading across which could be ruptured by applying slight force. There having been no inflammatory symptoms of any consequence during life, it seems extraordinary that so extensive an exudation could be poured out and organised in so short a space of time as nineteen hours. From a series of careful observations made on pus-formation in this infirmary, it seems that the existence of true pus-cells cannot be satisfactorily determined by the microscope under at least thirty-six hours after the infliction of the injury. This appears to hold good as well for wounds made by the surgeon (as in amputation) as for lacerations of the soft tissues caused by injury. Such observations afford important data for estimating the comparative rapidity of formation of two common products of inflammation. It may be the case that the extremely rapid pouring out of the exudation in this case was due to the active condition of the vital powers in childhood, but if this be so, it tends to enforce the necessity of prompt and efficient treatment in those diseases of children which, like croup and diphtheria, depend on the rapid formation of inflammatory products.

FOREIGN HOSPITAL REPORTS.

PATHOLOGICAL INSTITUTE, VIENNA.

SHORT NOTES OF POST-MORTEM EXAMINATIONS.

FOR these notes, and the following case reported from the Vienna General Hospital, we are indebted to Mr. Edward Sparks.

Primary Cancer of the Lungs.—A woman, aged twenty-two, died, as it was supposed, from pleuro-pneumonia. On opening the thorax, the right pleura was found to contain some false membrane, in which were embedded several soft greyish-white nodules of encephaloid cancer. Similar small nodules existed in the lower lobe of the right lung, the apex of which contained a small broncho-pneumonic cavity and some caseous infiltration of similar origin. The left upper lobe contained no cancer nodules, but was intensely congested towards the apex, and lower down was hepatised. The upper part of the lower left lobe was also free from cancer, but the lower two-thirds consisted of a huge mass of encephaloid nodules, one of which was as large as a man's fist. The growth extended towards the mid-line of the body, pushing the heart far over to the right. It projected also into the left pleura, and had infiltrated the diaphragm, so that nodules projected on its under side. No cancer was found in the abdominal organs, nor in any other part of the body except the thorax.

Caries of Vertebræ; abscess opening into the spinal canal; no paralysis.—In this case, caries of the bodies of the third and fourth lumbar vertebræ and destruction of the intervening fibro-cartilage led, on the one side, to a large psoas abscess, and, on the other, to perforation of the spinal canal and entrance of pus into the latter. Although at the post-mortem the canal was found to be filled with pus below the fourth lumbar vertebra, so that the cauda equina was bathed in it, yet the man had not a trace of paralysis during his illness, and no implication of the spinal cord was even suspected.

Intra-pericardial Rupture of the Aorta in a boy of sixteen.—The subject of the necropsy died suddenly while at dinner. He was only sixteen years old, and was supposed to have been previously healthy. On opening the pericardium, a large loose blood-clot of the size of two fists was found distending it. The heart had a hypertrophied left ventricle, whose wall was an inch thick. The cavity was but slightly dilated. The mitral and aortic valves were healthy. Just above the aortic valves was found a small irregular rent in the adjacent aortic wall—all but over a patch of advanced atheromatous degeneration. The intima was slightly sacculated at this point. On the pericardial side of the aorta existed a larger tear, through which the blood had made its way into the pericardium. On closer examination it was found that at the point where the aorta was penetrated a dissecting aneurism had been formed. The blood, after rupturing the intima, had split the media into two parts, so that one-half remained adherent to the intima and the other to the adventitia; finally, it had broken through the latter also. This case is interesting from the early age of the patient at which atheroma led to a fatal issue.

Disease of Tricuspid and Pulmonary Artery Valves, without affection of the left heart.—The patient, a man of twenty-seven, died suddenly in a state of extreme cyanosis. There was no history of any previous illness. On opening the pericardium, the heart appeared quite round from distension of the right side with blood. The mitral and aortic valves and the left cavities were found perfectly healthy. On the right side, however, the ventricle was so dilated and thinned that its wall appeared to be made up almost entirely of endo- and peri-cardium, through atrophy of its muscular substance. The endocardium was opaque and thickened. The tricuspid valve was insufficient, its segments thickened, and its free borders beaded from endocarditis. The pulmonary artery was very narrow where it left the ventricle, with valves shrunken up to its wall, and adherent by their edges, so that the orifice could not be closed at all. This was probably a case of congenital stenosis of the pulmonary artery, followed by disease of the tricuspid and ventricle later on, just as in another congenital abnormity of the heart—transposition of the vessels—the transposed aorta becomes the subject of endocarditis.

GENERAL HOSPITAL, VIENNA.

CASE OF PROBABLE PARTIAL OBLITERATION OF THE AORTA.

A MASON came in 1866 into the ward of Professor Skoda for some passing affection. In the course of his physical examination of him, Dr. Schrötter, Dr. Skoda's assistant, was led, by certain peculiarities which he found, to the above diagnosis, in which Professor Skoda coincided. We were enabled, by the kindness of Dr. Schrötter, to see the man recently, and now give the points in the case as they exist at the present time.

The subject of the supposed malformation is a strong healthy man of twenty-eight, who works hard all day at his trade, and is able to lift heavy stones, or go through any exertion without fatigue or the slightest distress. On stripping his chest, the first thing noticed was a tremendous heaving apex beat in the sixth intercostal space, two inches outside the left nipple, evident equally to sight and touch. Percussion showed considerable extension of normal cardiac dulness toward the left. At the apex both sounds were healthy on auscultation. At the third right intercostal space could be heard a loud, rough, systolic murmur, while the second sound was sharp and clear. At the same spot a systolic thrill could be felt on palpation, and a slight

heaving of the skin over the space could be seen on looking along the surface of the chest. There were no other auscultatory phenomena. On now examining the radial pulse, it was found to be full and strong, but very slow—only 48 per minute, and Dr. Schrötter said that it ranged normally from 44 to 50. The abdominal aorta could not be felt by deep pressure. In the femoral artery of both sides the pulse was very feeble, and distinctly retarded when compared with the radial.

No enlargement of the superior epigastric branches of either internal mammary artery or of the epigastric artery itself can be detected. In the left axilla can be distinctly felt a large pulsating vessel, running almost vertically from above downwards. This is probably an enlarged long thoracic artery. On the right side a similar enlargement does not exist. On the back, between the bases of the scapulæ and the vertebræ, more developed on the left than right side, are two bundles of enlarged vessels, which are evident to the eye, and can be felt pulsating. There can be little doubt that they are branches of the posterior scapular artery, carrying blood into the intercostals; other possible enlarged anastomoses, between branches of the subclavian and axillary arteries and the arteries in the lower part of the body, cannot be made out.

From what has been previously stated it will be seen that we have evidence here—1. Of hypertrophy of the left ventricle to a high degree, indicating an obstacle somewhere in the course of the aorta. 2. Of a diminished blood-stream through the aorta and its branches, below the origin of the left subclavian; and of a retarded pulse, showing that the blood takes a perceptibly longer time to get into these vessels at each systole than into the subclavians. 3. Of a normal pulse in the subclavians, and also, it should be added, in the carotids; an indication that the obstacle, whatever it is, lies beyond their origins. 4. Of a compensatory enlargement of certain branches of the subclavian and axillary arteries communicating with arteries which supply the trunk. 5. Of absence of all signs of heart disease, dyspnœa, palpitations, &c., which probably would not be the case if it were the aortic valves which are diseased. 6. Of a *stationary* condition of things. The physical signs are the same now as in 1866.

Finally, it seems that no other diagnosis is possible than that of a partial obliteration of the aorta, somewhere beyond the origin of the left subclavian, probably in the descending part of the arch.

There is one point which it is not easy to decide—i.e., the meaning of the murmur in the third intercostal space. Professor Skoda considers that it indicates an enlarged internal mammary artery; but then, why are its abdominal branches and the inferior epigastric artery not enlarged? Dr. Schrötter looks upon it as due to an aneurismal dilatation of the aorta behind the point of contraction, such as would be most likely to follow in the presence of the existing ventricular hypertrophy.

It would be only speculation to consider what further enlarged anastomoses exist in this case. That the compensation is in some way or other made complete is proved by the fact that the man's feet and legs are never cold.

Reviews and Notices of Books.

General Surgical Pathology and Therapeutics. In Fifty Lectures. By D. Theodor Billroth, Professor of Surgery at Vienna. Translated from the Fourth German Edition by C. E. Hackley, M.A., M.D., Physician to the New York Hospital, &c. pp. 676. New York: Appleton and Co. 1870.

Professor Billroth has long been recognised as one of the most scientific of living surgeons, his Lectures forming the most popular text-book of surgery in the German language. They have already gone through four editions in German, and been translated into all the chief European languages, English being the last. Although the lectures form a complete treatise on the principles of surgery, including pathology, diagnosis, and treatment, our own text-books are so good on the practical parts of the subject, that it is chiefly as a work on Surgical Pathology that the present book will be valued in this country, containing as it does a complete *résumé* of the existing state of knowledge on that branch. Since the time of Hunter, with one brilliant exception, England has produced no surgical pathologist who can be compared to those of Germany, the attention of English surgeons having been directed more to the practical than to the theoretical part of the subject; and consequently, in all our works both on general surgery and surgical pathology, the language used and the views expressed correspond more nearly with those of Hunter than with those of the great pathologists of the present day. The want of a book in the English language presenting in a concise form the views of the German pathologists has therefore been long felt, and we venture to say no book could more perfectly supply that want than the present volume.

During the last few years a complete revolution has occurred in pathology, especially with regard to inflammation, in consequence of the marvellous discoveries, by Cohnheim, Stricker, and von Recklingshausen, of the migratory powers of white blood-corpuscles. Five years ago the cellular pathology of Virchow was almost universally accepted; exudation was denied *in toto*, and all tissue changes were supposed to be due to the proliferation and subsequent further development or degeneration of the pre-existing cells of the affected part, of which the connective-tissue corpuscle and its modifications were the most important. The connective-tissue corpuscle is now deposed, and the white blood-corpuscle is reigning in its stead; and the doctrine of exudations is revived, with the addition of the cellular elements as well as the liquor sanguinis of the blood passing through the walls of the vessels. Professor Billroth, who was formerly a believer in the cellular pathology of Virchow and of the Berlin school, has now adopted the new views to the fullest extent. In short, to use his own words, "observation is piled on observation, and we are driven to the supposition that all young cells found abnormally in the tissues are wandering white blood-cells." He makes a reservation in favour of the proliferation of the cells of inflamed cartilage, but ends by remarking that "it is actually necessary to prove it over again by special new observations, because the surprising new facts regarding inflammation are so imposing that one can scarcely believe his eyes." How far the new views are correct, and how long it will be before we return to the exudation of "coagulable lymph," and the development of cells in a "blastema," remains to be seen. In addition to the great changes thus made in pathology, as the result of observation and experiment on living animals, our knowledge of the minute anatomy of all morbid growths has been enormously increased during the last twenty years by the improved means adopted for the preparation of microscopic objects. As the art of hardening specimens and of preparing and staining sections developed, the knowledge of the minute structure of morbid growths proportionately increased, necessitating numerous changes in the classification, nomenclature, and descriptions of tumours; and until the appearance of the present work, we believe these have never been completely, and yet clearly and concisely, put before the English student. The lectures on Tumours occupy over a hundred pages of the present volume, and are illustrated by numerous and well-executed woodcuts.

It would be impossible to give any idea of the amount of matter in this volume which will be new to those not familiar with German medical literature, without giving a summary of the greater part of the pathology it contains; and we have no desire to do this, as we should recommend everyone interested in the science of surgery to read the

book for himself. We do not by any means intend to convey the idea that we agree with all the views brought forward by Prof. Billroth; but it would be impossible here to go into a discussion on disputed points of surgical pathology, as many subjects, hints, and ideas suggesting future work are given in the lectures which will doubtless be of value to the rising generation, whom the author congratulates on the large field for original observation still left.

With regard to the practical part of the book we have but little to say. It shows, as far as mere writing can, that, great as Prof. Billroth undoubtedly is in theory, he is not far inferior in practice. His views of treatment are generally more in accordance with English ideas than is usual in foreign works on surgery; but, as he generously acknowledges, we seem to have but little to learn on this part of the subject from the Germans. In the treatment of diseases of the joints, Prof. Billroth is a great advocate for the early and persistent use of the plaster-of-Paris splint, whenever it is possible to apply it, and by this means he asserts that he cures almost every case of white swelling of the knee coming under his care. This is a point well worthy of the attention of English surgeons, with whom amputation or excision is at present a very frequent termination of such cases. The whole of the lectures on diseases of joints are particularly interesting, and the pathology of white swelling is given more clearly and definitely than we ever remember to have seen before.

On the whole, this work will be most welcome in this country, as supplying a want which must have been felt by all real students of surgery. It is not exactly a book we should recommend to a student preparing for the examination at the College of Surgeons, the practical part not being sufficiently full, and the pathological views expressed being certainly opposed to those of the majority of the Board of Examiners; but we would strongly recommend it to all who take any interest in the progress of thought and observation in surgical pathology and surgery.

The translator has, on the whole, fairly succeeded in representing the clear, forcible style of the original, which somewhat resembles that of the two most celebrated of English lecturers—Sir A. Cooper and Abernethy,—but is, perhaps, a little more refined. There are, of course, many Yankee expressions in the book, and the translator seems at times to have been puzzled with the German, producing a sentence now and then which is perfectly incomprehensible; but still the translation answers its purpose very fairly, and we must not "look a gift horse in the mouth."

The book is well printed, and illustrated by 152 woodcuts, which are still good, though they have not the sharpness and delicacy of those in the earlier German editions.

OUR LIBRARY TABLE.

The Dublin Practice of Midwifery. By HENRY MAUNSELL, M.D., formerly Professor of Midwifery in the Royal College of Surgeons in Ireland. New Edition. Edited by THOMAS MORE MADDEN, M.R.I.A., L.K.Q.C.P.I., Senior Assistant-Physician, Rotunda, Dublin. London: Longmans, Green, and Co. — This book has been so long before the profession as to render a review of it in the ordinary sense of the word unnecessary. It is thirty-six years since it was first written by Dr. Maunsell, and has naturally for most of that time been a favourite manual of midwifery in Dublin, being clear and concise, and on the whole judicious. Still it is very much to be questioned whether it is wise to republish as a new book a work that thirty-six years ago represented the practice of a particular city. The time has come when we should have neither Dublin midwifery nor Edinburgh midwifery, but practical and scientific midwifery as recognised by all good teachers in Dublin, London, Edinburgh, and throughout the world. Both the author and his editor admit that the art of midwifery and our views of puerperal disease have greatly changed since this book was written, and there is great inconvenience in preserving the identity of the book and in adapting it to altered views. To take one example of the difficulty of harmonising the new and the old. Puerperal fever is treated of in two separate chapters—one by the author, and the other at a distant part of the book by the editor. It would depend on whether the reader's eye caught one chapter or the other, whether he would regard and treat the disease in the light of old doctrines or of new ones; and the difference is very serious. According to chapter XX., the sheet-anchor in treatment is the lancet, used in a decided manner and with the patient in a recumbent posture. After bleeding and purging, mercury to salivation is to be used. All that is said about regimen is that it must be rigidly antiphlogistic. Even in the typhoid form, where bleeding is declared inadmissible, the constitutional action of mercury is the treatment upon which reliance is to be placed. In chapter xxiv. the consistency of author and editor is saved by the doctrine that puerperal fever is now quite different from what it was, that it is asthenic and indicative of blood-poisoning, and urgently requires stimulants, nutriment, and turpentine—the Rotunda remedy in peritonitis. We need not further illustrate the difficulty of making a new book out of an essentially old one by adding a few paragraphs and new chapters. The new chapters are sufficient evidence of the editor's acquaintance with modern midwifery, and of the fact that there is no longer such a thing as Dublin midwifery.

Notes and Recollections of an Ambulance Surgeon. Being an Account of Work done under the Red Cross during the Campaign of 1870. By WILLIAM MACCORMAC, F.R.C.S., Assistant-Surgeon to St. Thomas's Hospital, Consulting Surgeon to the General Hospital, Belfast. pp.155. London: J. and A. Churchill. 1871. — The greater part of this volume has already seen the light in the pages of a contemporary. The author has briefly recapitulated his experience, which was necessarily large, since he was in a position to see much military surgery. We notice in the preface that Mr. MacCormac allows that his desire for conservatism sometimes led him to preserve limbs at the expense of the patients' lives; and this embodies, we believe, the result that military surgeons have long come to, the effects of gunshot wounds being always much more serious than those of accidents in civil practice. The work is illustrated by a few woodcuts, and by ten plates of bones injured by bullets, reproduced by a new process termed "Heliotype," which appears to combine the advantages of photography and lithography in a remarkable manner.

Introductory Text-book of Meteorology. By ALEXANDER BUCHAN, M.A., F.R.S.E., Secretary of the Scottish Meteorological Society, &c. Blackwood and Sons, Edinburgh and London. 1871.—Medical men, in common with other members of the educated classes, generally supply themselves with a few meteorological instruments, at any rate, by which they may gain some information about the weather, and attempt to forecast "what the day will bring forth." Some do more than this, and systematically make meteorological observations. The members of the medical services, for instance, are now taught meteorology at Netley as a branch of science in which it may fall to their lot to be engaged either at home or on foreign stations; and the influence of climate on health and disease is a matter of no little importance to medical men and to patients, and the latter often appeal to the former for information with regard to it. To all who are interested in the subject we can recommend Mr. Buchan's text-book as at once a handy, clear,

and scientific introduction to the study of meteorology, a branch of terrestrial physics a knowledge of which is indispensable to the student of physical geography and geology. The book, besides being well and clearly written by a man who has evidently mastered his subject, is well illustrated with maps and diagrams.

The Poor-law Medical Officer's Manual. By W. G. LUMLEY, Q.C., Assistant-Secretary to the Poor-law Board. Third Edition. London: Knight and Co.—This is a most useful manual of everything relating to the qualification, appointment, duties, liabilities, protection, and superannuation of medical officers employed under the Poor Law, whether in connexion with districts, dispensaries, or workhouses. It also contains every regulation relating to the qualification, appointment, and duties of public vaccinators. The relation of the medical officers to boards of guardians, the Privy Council, and the Poor-law Board is clearly set forth, and also their duties as regards lunatics, sanitary regulations, and friendly societies. A careful study of this book by newly-appointed officers of the Poor Law would, we are convinced, save many an officer from a vast amount of preventable irritation, and make his course comparatively smooth. It is a manual which should be in the hands of every Poor-law medical officer.

An Introductory Text-book of Zoology, for the Use of Junior Classes. By H. ALLEYNE NICHOLSON, M.D., D.Sc., Ph.D., F.R.S.C., F.G.S., Lecturer on Natural History in the Medical School of Edinburgh, &c. Blackwood and Sons, Edinburgh and London. 1871.—This is introductory to the larger works by the same author, which we have already reviewed, on the subject of zoology. It is a small and compact volume, very well illustrated, and written without any technicalities, except such as are unavoidable, and it is therefore very suitable for junior classes in schools. There is no reason why anyone should not become acquainted with the principles of the science, and the facts on which they are based, as set forth in this volume.

The Surgery of the Rectum. Being the Lettsomian Lectures on Surgery, delivered before the Medical Society of London, 1865. By HENRY SMITH, F.R.C.S., Assistant-Surgeon, King's College Hospital, &c. pp. 163. London: J. & A. Churchill.—That these lectures have already reached a third edition is a proof of their merit. The views inculcated are sound and practical; and the illustrative cases afford much valuable information for those who may require a practical guide in dealing with a painful and troublesome class of diseases, than which none are more susceptible of remedy.

Scala Latina. A Series of Elementary Latin Prose Exercises. By J. WESTLEY DAVIES, M.A., Head Master of Tamworth Grammar School. London: Longmans. 1871.—Students who wish to ground themselves thoroughly in the principles of Latin accidence and syntax will find this little volume an excellent auxiliary to such grammars as Kennedy's, King Edward the Sixth's, or, better still, the Public School Primer. Those, also, who are desirous of regaining the "fine edge" of their Latinity, which lapse of time or professional occupation may have blunted, might do worse than give it a spare half-hour every day.

Vaccination. A Paper read before the Torquay Natural History Society. By C. PAGET BLAKE, M.D. Edin., M.R.C.P.L., President of the Society. Printed by special request.—This is a clear and conclusive account of the introduction of vaccination, and of its influence in checking small-pox. We agree with the author that reasoning is thrown away on persons who regard small-pox as a blessing, and a law for preventing its ravages as an interference with the liberty of the subject. It is indeed unfortunate that mischievous statements cannot be successfully encountered by mere force of law; and it is on this account that popular expositions of the truth are particularly valuable at the present moment.

The Monthly Microscopical Journal. Edited by H. LAWSON, M.D. No. XXX. London: R. Hardwicke.—The present number completes the fifth volume of this periodical, and we congratulate Dr. Lawson on its usefulness, and, we hope we may add, on its success. The articles contained in this number are—1. Some additional observations, by Dr. Woodward, on the Podura scale. 2. A long paper, by Dr. R. L. Maddox, on the construction of the scales of some of the Lepidoptera. 3. A paper, by Mr. Lowne, on the so-called Suckers of Dytiscus and the Pulvilli of Insects; and the usual Periscope of microscopical research.

THE THIRTEENTH ANNUAL REPORT OF THE SCOTTISH COMMISSIONERS IN LUNACY.

HARDLY inferior to the interest with which the yearly Blue-books of the Medical Officer of the Privy Council are looked for is that which awaits the annual reports of the Scottish Commissioners in Lunacy, so painstaking are these gentlemen in their presentation of facts, so scientific in their preliminary digest of the practical conclusions these facts appear to enforce. In this latter particular, indeed, they are superior not only to their fellow-commissioners of England and Ireland, but, as a rule, to the compilers of most sanitary blue-books, with the one signal exception we have alluded to. The compilation of an official report is almost one of the fine arts; demanding, as it does, a sense of proportion, an eye, so to speak, for moral perspective, without which it is apt to be little more than a conglomerate of loosely-cohering facts. But when, in addition to the artistic arrangement of its contents, the report is introduced by a scientific interpretation of their significance, we have a document which is not only not dull, but something decidedly attractive.

After a well-merited tribute to the services of the ex-commissioner, Dr. W. A. F. Browne, who has had, unfortunately, to demit active duty from failure of sight, the Report proceeds to state the number and distribution of the insane in Scotland on January 1st, 1870, exclusive of unreported lunatics provided for in private dwellings from private sources. Under official cognisance there were 1295 cases maintained at the expense of friends, 6227 by parochial rates, and 49 by the State. Since January 1st, 1858, the number of lunatics officially known to the Commissioners has increased from 5794 to 7458. Of this increase in the number of patients in public and parochial asylums, 442 arise from the decrease in private asylums, and 286 from the decrease in private dwellings, leaving an increase of 1664 attributable to the growth of lunacy, or at any rate to the increased number of lunatics in asylums. In the number of pauper lunatics placed in establishments there has been an increase of 1775; and in that of private patients similarly disposed of, an increase of 151, since January 1st, 1858. On the other hand, there is a decrease of 315 in the number of pauper lunatics in private dwellings, and an increase of 29 in the number of private single patients under the Sheriff's order or sanction of the Board. The results of 1870 alone give an increase of 234 pauper, and 35 private patients in establishments. Of the total number of private insane, and of the total number of pauper insane resident in establishments at January 1st, 1870, the proportion per cent. was 20 private and 80 pauper, while the same proportion at January 1st, 1858, was 25 private, and 75 pauper; that is to say, a fourth of the patients in asylums at January 1st, 1858, were maintained from private sources, and at January 1st, 1870, only a fifth.

The ratio of recoveries among private and pauper patients is in close accordance with the ratio of admissions. A much larger proportion of private patients, however, are removed unrecovered, and, as a consequence, the mortality of these is in a lower ratio, when compared with the

admissions, than that of paupers. The difference in the ratio of removals of unrecovered private and unrecovered pauper patients depends chiefly on social causes—not, or at least only fractionally, on the peculiar type of mental malady. When the cost of maintenance is defrayed from private sources, and especially when the patient's family is poor, a strong inducement arises to remove him from the asylum as soon as all hope of recovery is past, or the malady has taken a manageable form; whereas when the parish defrays the cost of maintenance, there is no pecuniary motive affecting individuals to prompt to removal. The family of the patient, as well as the inspector of the poor, being relieved of all trouble in connexion with the case, leave him, of course, in the asylum—a policy which tends to produce consequences of daily-increasing gravity. "It is difficult," say the Commissioners, "to believe that any real necessity has arisen for the detention of 504 pauper lunatics in asylums at the 1st of January, 1870, above the number of those detained at the 1st of January, 1868, especially as in the same period we find an increase of only 5 in the number of private asylum patients. On this account, as well as for other reasons, we are led to believe that the increase of pauper lunatics is in great measure due to the artificial fostering of legislation."

The Commissioners produce evidence to show that in the proportion of pauper lunatics to the population great discrepancies occur in different counties, dependent on differences in the constitution and condition of the inhabitants. There is, they maintain, a greater degree of mental activity in the town than in the country—a fact which explains the more frequent occurrence of insanity among the busy urban than among the placid rural population. The increase of lunacy, however, it should be remembered, is chiefly found among the lower classes in general, who are never very active mentally, and who live under insanitary conditions. The changes, moreover, among pauper lunatics in the asylums of large towns and manufacturing districts are much more frequent than in those of pastoral or agricultural districts; much greater in Lanarkshire than in all Scotland, and in all Scotland than in Sutherland or Rossshire.

At this stage the Report raises some questions of grave general interest, which we shall take another opportunity of noticing.

THE MIDDLESEX HOSPITAL REPORTS.

Of the various admirable reports now prepared annually by hospital registrars, none exceed in value and elaboration those of the Middlesex Hospital. The pages of reports such as those before us, largely composed of tables, seldom present a very enticing appearance to a reader—rather the reverse; but as affording material for reference, they deserve more attention from authors than is usually bestowed on them. At the Middlesex Hospital the registrar has not only to undertake the ordinary clinical duties usually appertaining to that officer, but those of morbid anatomist, the medical and the surgical registrar having to superintend the post-mortem examination of bodies from his own wards, and to demonstrate the morbid appearances present to the students. A large and varied field is thus afforded for producing valuable reports—opportunities which have been well utilised by Dr. John Murray and Mr. Henry Morris, the medical and surgical registrars. Both reports contain, of course, a general table of cases treated during the year. In Dr. Murray's report noticeable and important features are a detailed table of the morbid appearances found in the medical post-mortem examinations, to which an abstract is appended, and an elaborate account of 123 cases of acute rheumatism, which will prove of much value for statistical purposes. Of the diseases originating in the medical wards several were of typhoid fever, the occurrence of which led to the appointment of a medical sub-committee. This committee reported that they were unable to trace any connexion between the occurrence of typhoid fever and the water-supply of the hospital, or other ingesta.

Mr. Morris's report very naturally deals in detail with the subject of cancer, 126 cases of which disease were treated in the cancer wards of the hospital during the year, and are tabulated in the report. This part of Mr. Morris's report is very valuable. Mr. Morris has also carefully tabulated nineteen cases of hernia and the results of treatment, and has bestowed equal care in reporting on compound fractures, operations, and the cases of disease originating in the hospital. The post-mortem appearances of 91 patients, tabulated and abstracted, completes the surgical report. We congratulate the authors on their labours.

Foreign Gleanings.

PROGNOSIS IN CARDIAC DISEASE.

DR. LOOMIS lately presented to the Medical Society of New York a report of ninety autopsies of subjects affected with disease of the heart. Lesions of the valves, hypertrophy, and dilatation were found together in fourteen cases, and among these seven died of the heart disease. Death was sudden in only one case, and mainly caused by narrowing of the mitral and tricuspid orifices. In fifteen cases the valvular lesions were complicated with hypertrophy, and of these eleven died of the cardiac affection. Death was sudden in five cases, thus divided: aortic disease, one case; mitral, one; both together, one; mitral and tricuspid, one; mitral and pulmonary, one. In forty-six cases, where the valvular lesions were free from complications of hypertrophy or dilatation, only two patients died from actual disease of the heart, death being sudden in neither case. Altogether we have twenty-six cases out of the ninety where death was caused by the heart complaint, the end being rapid in nineteen cases. Sudden death from the cardiac lesion occurred in ten of these latter cases; in the nine others the sudden death was brought on, four times by cerebral apoplexy, in four by uræmic convulsions, and in one by croup. In sixteen cases the cardiac lesion was followed by slow death, and in sixty-four cases the patients died of complaints unconnected with heart disease.

Regurgitating murmurs are very important signs as regards diagnosis, but of much less value in respect of prognosis. The loudest and roughest bruits de souffle are not necessarily followed by rapid death. When such souffle is uncomplicated with hypertrophy or dilatation the prognosis is relatively favourable. But when hypertrophy and dilatation occur, several complications may arise, and prognosis becomes very serious. Dr. Gairdner states, in his "Clinical Medicine," that he knows a patient who has had mitral narrowing for the last thirty years. Dr. Loomis himself has had under his care, for the past eight years, a patient, in apparently good health, with enormous aortic insufficiency; he has suffered three attacks of pneumonia. In this case, however, there is no dilatation. The valvular lesions which occur during the development of the organism are more rapidly fatal than those which happen at an advanced period of life. Dr. Flint thinks that aortic disease is the most dangerous; but Dr. Loomis considers mitral insufficiency just as perilous, and his opinion seems fully justified by the statistics given above.

REVACCINATIONS.

Dr. Perroud, secretary to the Vaccination Committee, presented, on the 23rd of March last, a report to the Medical Society of Lyons, in which the advantages of vaccination during the epidemic of variola which has raged in that city are lucidly exposed. Among several important remarks, we especially noticed the advice of not resting satisfied with negative revaccinations. When the latter fail, they should be repeated; as it has been known that, in such cases, the disease has broken out and proved fatal. We should go on revaccinating, M. Perroud thinks, until proper vesicles are produced.

CHLORAL HYDRATE AND COD-LIVER OIL.

The *Gaz. Farm. Ital.* advocates the addition of chloral hydrate to cod-liver oil, which renders it much less nauseous, and prevents the night-sweats of the phthisical invalid, induces sound sleep, and creates appetite. It is prepared as follows:—Ten grains of pure chloral hydrate crystals to one hundred and ninety grains of cod-liver oil, digested in a sand-bath with gentle heat. Dose, six tablespoonfuls daily.

THE LANCET.

LONDON: SATURDAY, JULY 1, 1871.

ON Thursday next the Fellows of the College of Surgeons will have to elect four representatives in the Council of the College, who will influence in no small degree the progress of the corporation and its position in public opinion during the next ten years. It behoves the electors therefore to be careful, in exercising their franchise, not to sacrifice public interests to private feeling, and to select gentlemen who have given the constituency ground for believing that they will have the interests of the College rather than those of the Council alone at heart in the votes they will give at the Council board.

In speaking of the retiring members who offer themselves for re-election, we cannot but express the feeling of regret which is generally felt that Mr. COCK should have been so ill-advised as to come forward again, when he has occupied a seat at the Council since 1856, and has also served the presidentship. Mr. COCK is already a member of the Court of Examiners; and if there is one thing upon which the profession is agreed, it is the necessity for separating the Council and the Court of Examiners. Should Mr. COCK be re-elected, a bad example will be set to those who are his seniors or contemporaries in the Council, since they will probably feel bound to come forward a third time for election, the only precedent at present being in the case of Mr. SOLLY.

Mr. BUSK, who is now the senior vice-president of the College, was elected to the Council in 1863, and became an examiner in 1868. We are perfectly aware that strong efforts are being made by the "College party" to secure Mr. BUSK'S re-election, on the ground that he is a man of great scientific reputation, that he has held the office of Professor of Comparative Anatomy and Physiology in the College, that he has taken great interest in the museum, and that he has acted as chairman of the Court of Examiners for the last nine months. We are perfectly aware of all this; but no personal considerations shall prevent our stating the ground on which we believe Mr. BUSK not to be a suitable representative of the Fellows in the Council. This is, that Mr. BUSK has again and again in the Council-room declared that the Fellows have nothing to do with the management of the College; that to the Council alone does this management of right belong; and that the Council is in no way responsible to the Fellows for the way in which their duty is performed. If the Fellows choose to elect as their representative a gentleman who honestly professes these views, it is of course open to them to do so.

Mr. LE GROS CLARK, the remaining candidate for re-election, is well known as an amiable gentleman, who has at least not opposed, if he has not done much to forward the progress of reform in the College. As Professor of Human Anatomy and Surgery his lectures were popular, and as an examiner his previous experience at the University of London cannot but have proved of essential service. We anticipate that Mr. CLARK will be re-elected "with the aid of St. Thomas."

Of the new candidates for popular favour we need say little, as their claims have been so recently before the electors. Mr. SPENCER WELLS has the claim of priority both in candidateship and in standing; and, moreover, his steady refusal to allow any canvassing on his behalf deserves recognition. Mr. CRITCHETT'S popularity will doubtless secure him many votes from personal friends; whilst his professional position as one of the leading ophthalmologists will commend him to many more. Mr. BARNARD HOLT'S surgical reputation, and the straightforward "confession of faith" which he has so lately put forward in these columns, entitle him to the full support of the Fellows. We hope to see all three of the new candidates elected, for we feel sure that by this method alone the cause of progress in the College of Surgeons will be secured.

THE Government have introduced their Bill for amending the Vaccination Act of 1867. It contains several important provisions having for their object the removal of difficulties in carrying out the Acts now in force; and it shifts the main responsibility from the Privy Council to the Poor-law Board. After some short explanatory clauses, it is provided that the appointment of a vaccination officer shall henceforth be compulsory on the guardians. This officer is to be assigned districts coinciding either with those for vaccination or with those for the registration of births and deaths. The registrar of the district will transmit to him, by post or otherwise, at least once in every month, a return of the births, and of the deaths of children under twelve months, which have been registered from the district of the officer to whom the return is sent. Having done this, the registrar's duties with respect to vaccination cease; and the register of successful vaccination will in future be kept by the vaccination officer. It is worth while recording the fulfilment of a prediction made by the Registrar-General when the Vaccination Act of 1867 was passed. He said that the registration of vaccination by the registrar was impracticable; and, although we believe that the register will be seldom appealed to, for the simple reason that the best evidence is practically found upon the arm of the person vaccinated, we entirely approve of the new arrangement, because it will enable the vaccination officer to see whether every child born within his district is vaccinated or not.

The next important clause provides that persons revaccinated at the public cost shall be compelled to return at the end of a week for the purpose of having their arms inspected, under a penalty of half-a-crown, to be recovered by the guardians as a debt. Now we admit that the proposal is a fair one from an abstract point of view. It seems only reasonable that a man who has been revaccinated at the public cost should return to show himself, and should be called upon to pay for the operation if he fail to do so. But the abstract justice of the case is not the thing wanted. Facts have abundantly proved the desirability of all persons being revaccinated; and the question is, will the proposed arrangement promote this end? We fear not. In the first place, the very possibility of being called upon to

pay will deter many people from going to the station, where everyone is supposed to have the right of gratuitous vaccination. It is always unsatisfactory to mix up payments with gifts. Besides, what is to deter a man from moving off to another town as soon as the operation is performed? And should he do so, it will scarcely be worth the trouble of following him for half-a-crown. Then what an outcry would be made if he were found too poor to pay. Indeed, we are of opinion that the unpopularity caused by enforcing such payments would not be compensated by the money recovered. But even if the point be granted, why should the sum be fixed at half-a-crown? The operation costs the guardians only a shilling in some cases, and possibly five shillings in others. On the whole, therefore, we think this clause injudicious; and that it would be better for the public to pay the vaccinator for every genuine operation performed, under proper regulations, whether the operation be or be not successful, and whether the revaccinated person return for inspection or not.

The Act limits the penalty in the manner proposed by the Vaccination Committee — that is, no parent will in future be liable to be convicted, if either (*a*) he has been previously adjudged to pay the full penalty of twenty shillings, or (*b*) he has been previously twice adjudged to pay any penalty. This is the defective point in the Bill. We are no advocates of harsh penalties. It is not desirable to make a martyr of anyone. But, in the interests of the children whose lives are endangered by the neglect of early vaccination, we have a right to take the strongest measures short of oppression to secure their adequate protection. If the Legislature were to order the vaccinator to visit and offer vaccination in the house of a defaulting parent, a very small penalty would be quite sufficient, for the moral influence of an intelligent person, which in such a case is far more powerful than law, would be brought to bear. No one could complain of such a visit, and the Legislature would have done all that circumstances permit.

The Act provides a penalty of twenty shillings for preventing any public vaccinator from taking lymph under Section 17 of the principal Act (1867). There is a penalty of a like amount for not producing the child when summoned to do so under Section 31. Proceedings under this section cannot any longer be stopped by removing the child from the district. The non-registration of the vaccination has also the same penalty attached to it as neglect of vaccination. In future the public vaccinators will be authorised to grant a certificate of vaccination on the inspection of the arms of children who have been vaccinated by other persons. And lastly, for the consolation of Poor-law medical officers, they will be permitted to act as public vaccinators as regards the inhabitants of houses in which small-pox at the time prevails.

Such are the principal changes effected in the details of administration by the proposed Bill, and from them we turn to the question of governmental authority. It will be found that with respect to vaccination the duties of the Registrar-General cease. The forms hitherto provided by him will in future be provided by the Poor-law Board, which is endowed with the same administrative powers in respect of vaccination as are now exercised by it in respect of poor relief. Thus the Poor-law Board is empowered to make rules, orders, and regulations; to prescribe the salaries and duties of the officers employed, their number, and the nature of their appointments, the boundaries of the districts, &c.; to issue forms and appropriate books; to alter contracts and prescribe new forms of contracts; and, in fact, the Board is even authorised to alter the forms of the Vaccination Act itself. All this has our most hearty approval. Nothing is worse than an attempt to put details into an Act of Parliament. Let the Poor-law Board be held fully and completely responsible, and it is only fair that it should be free to make what administrative arrangements are found to be most conducive to the public convenience. We would advocate the removal of some of the administrative clauses from the Act of 1867; that, for instance, which makes it illegal for a public vaccinator to vaccinate a person residing in another district, and that prescribing the nature of the fee. Both these matters would be better in the hands of the central executive to modify if occasion requires.

But here our commendation ceases; and from this point the proposed Bill betrays the weakness and timidity of a divided Government. It is evident that there is division of opinion between the Privy Council and the Poor-law Board. To be logical, the Bill should have transferred both Dr. SEATON and his staff of vaccination inspectors to Gwydyr House. How otherwise can it be expected that the proposed arrangement will work harmoniously. The Privy Council will still be ordering the Poor-law Board to reduce the number of public vaccinators and enlarge the districts; and it may be, as in a recent instance in the Isle of Wight, that they will refuse to do so. If the Poor-law Board is to exercise a real control, such as the proposed Bill contemplates, it must have a larger staff of medical inspectors, and those inspectors must be subject, not to the Privy Council, but to the Poor-law Board. Moreover, what a farce it is to give the power of fixing salaries &c. to the Poor-law Board, whilst leaving the public grant for vaccination in the hands of the Privy Council. Unless, therefore, the whole authority now vested in the Privy Council be transferred to the Poor-law Board, matters must go on in the same unsatisfactory manner as they do at present. We shall have the same long correspondence between them and the same conflict of opinion and administrative detail. What a splendid opportunity of securing a Ministry of Health. Let the Government bring forward a short measure for consolidating the various departments engaged in sanitary work. We believe it would be hailed with gratitude as a most important step in the direction of sanitary reform, and in respect of vaccination it is the only exit from a complete dead-lock.

PROFESSOR TYNDALL has once more returned to his favourite subject in the theatre of the Royal Institution, and has delivered there a lecture which has been reprinted in the number of *Nature* for the 15th inst. In this, after relating Mr. LEWES's account of some experiments by Von RECKLINGSHAUSEN, and after referring to the antiseptic dressings of Professor LISTER, he proceeds to a new illustration, and adorns it by some new inferences. We

might be accused of injustice if we did not quote the very words of the learned Professor and of his authority:—

"Another note which I received a day or two ago has a bearing particularly significant at the present time upon this question of dust and dirt, and the wisdom of avoiding them. The note is from Mr. Ellis, of Sloane-street. 'I do not know,' he writes, 'whether you happened to see the letters, of which I enclose you a reprint, when they appeared in *The Times*. But I want to tell you this in reference to my method of vaccination as here described, because it has, as I think, a relation to the subject of the intake of organic particles from without into the body. Vaccination, in the common way, is done by scraping off the epidermis, and thrusting into the punctures made by the lancet the vaccine virus. By the method I use (and have used for more than twenty years), the epidermis is lifted by the effusion of serum from below, a result of the irritant cantharadine applied to the skin. The little bleb thus formed is pricked, a drop of fluid let out, and then a fine vaccine point is put into this spot, and after a minute of delay it is withdrawn; the epidermis falls back on the skin and quite excludes the air—and not the air only, but what the air contains. Now mark the result: out of hundreds of cases of revaccination which I have performed, I have never had a single case of blood-poisoning or of abscess. By the ordinary way the occurrence of secondary abscess is by no means uncommon, and that of pyæmia is occasionally observed. I attribute the comparative safety of my method entirely—first, to the exclusion of the air and what it contains; and secondly, to the greater size of the apertures for the inlet of mischief made by the lancet.'

"I bring these facts forward that they may be sifted and challenged if they be not correct. If they are correct it is needless to dwell upon their importance, nor is it necessary to say that if Mr. Ellis had resigned himself wholly to the guidance of the germ-theory he could not have acted more in accordance with the requirements of that theory than he has actually done. It is what the air contains that does the mischief in vaccination."

We confess to a lingering hope that Professor TYNDALL, when he cited and supported the above statement, was amusing himself by an experiment upon the credulity of his audience. Such a supposition is less painful than to imagine that one who has climbed the heights of physical philosophy can be himself so easily misled. When Mr. ELLIS's letters appeared in *The Times*, they were regarded by the profession as being, on the whole, better treated by silence than by words. Everyone who has ever seen a blister knows that the stretched cuticle, when punctured, does not at once apply itself completely to the surface that it previously covered, but falls more or less in folds, leaving spaces which air must occupy—carrying with it whatever "it contains." Everyone who has ever vaccinated knows, also, that in the ordinary methods the entrance of air is prevented by the effusion of blood, which immediately dries into a crust, and hermetically seals the solution of continuity below. Mr. ELLIS's blister must distinctly tend to promote the contact of air with the fluids of the body. His assertion that the occurrence of secondary abscess is by no means uncommon, and his suggestion that his own experience is exceptional in that he has had no such occurrence "out of hundreds of cases" are alike in direct opposition to facts within the knowledge of every practitioner. If Professor TYNDALL has only such buttresses as these for the doctrines to which he has committed himself, he would do well to lay aside his endeavours to promulgate them.

From vaccination, Professor TYNDALL goes on to speculate upon other questions of medical experience, and to treat of specific contagion generally, in its relation to the derivation of all life from pre-existent life. He here defends himself from an imaginary charge of stepping beyond his *métier*, and does so on the plea that he is not writing a prescription, nor seeking to draw any conclusion from the pulses or tongues of his audience. Such a limitation or description of the sphere of medical duties would be intelligible if it proceeded from the lips of a monthly nurse; but a man of science ought to entertain a different view of the functions of a physician, just as a man of even ordinary discretion might feel some misgiving about his fitness to appreciate the data offered by studies quite foreign to those in which he is accustomed to engage. Before Prof. TYNDALL can hold his own in biological investigations, he must find a new balance in which to weigh the value of the statements made to him by those whom he puts forward as authorities.

Our reference to statements makes it worth while to point out that Professor TYNDALL appears to be desirous of introducing a new nomenclature, which he has not yet made clear by definitions. We have already seen that he advances Mr. ELLIS's "facts" in order that they may be sifted, and challenged if they be not correct. He refers to the advocates of spontaneous generation as dealing in "*dubious facts* and defective logic." Now it is really worth while to consider for a moment what must be the state of mind of a lecturer who speaks about "dubious facts," and who proposes certain other facts as proper subjects for the operation of sifting, by which, it seems, they may be found not to be "correct." We can form no conception whatever of what Professor TYNDALL means either by a correct fact or by a dubious one. The conclusion of the lecture was devoted to a description of an improved respirator, intended to enable its wearer to breathe safely in a burning house; and here Professor TYNDALL, dealing with questions which he has made his own, found himself once more on firm ground, and was able fully to sustain the reputation that at first he had so gratuitously endangered.

DR. KRONID SLAVJANSKY contributes a paper on the Normal and Pathological Histology of the Graafian Follicles of Man to the last part of Virchow's *Archiv* (Band li., Heft. iv.) His observations have been made on subjects of all ages brought to the Anatomical and Pathological Institute of the Medico-Chirurgical Academy of St. Petersburg. The preparations were macerated immediately after removal from the body (which was usually effected in from three to eight hours after death), for a week or a fortnight in MÜLLER's fluid, then placed in a 70 per cent. solution of spirits of wine, and then in a 90 per cent., after which fine sections were made. In the examination of the ovaries of children he recognises three forms of follicles—(1) primordial follicles, which are the youngest; (2) a transitional form to the mature follicles; and (3) more or less developed mature Graafian follicles.

The primordial follicles are of roundish or elliptic

form. They consist of the primordial egg, with the yelk, the germinal vesicle, and germinal spot surrounded by a series of small round cells in contact with one another, and without any intermediate substance. In very young follicles a spot can always be found where these cell-series are interrupted, and where the egg apparently is in direct contact with the wall of the follicle. This is the follicle-pole of PFLÜGER. At a subsequent period this spot is covered by a layer of cells. The wall of the follicle presents no characters distinguishing it from other parts of the ordinary stroma of the ovary. On its inner surface, however, he admits the presence of a lustrous layer, similar to that found in acinous glands, in which sometimes a few fusiform cells may be discovered, and thus differs from WALDEYER, who in his description of the structure of the primordial follicles states that they are destitute of a membrana propria, and that the stroma tissue lies in immediate contact with the contents of the follicle, the fibres being arranged circularly around it. Thus it appears that in the very youngest follicles the egg is surrounded by a series of epithelial cells representing the future membrana granulosa. The delicacy and instability of these cells explain the circumstance of their being denied by KLEBS, SCHRÖN, and FLORINSKY. Such follicles as those that have just been described may be seen in certain parts of the ovary, at every age from the eleventh week of intra-uterine life to the grand climacteric. In embryoes they are usually found between the cortical and medullary layers; in new-born children they are found in all parts; in adults they are met with only in the most superficial layers of the cortex, where they are closely packed, and when badly prepared, in consequence of the destruction of the epithelium, look like rows of large cells from which, near the centre of the ovary, the follicles appear to develop. SLAVJANSKY accepts and corroborates WALDEYER'S description of the origin of the primordial follicles from tubes. He describes a somewhat complicated histological process in which the follicles undergo a physiological destruction; this commences with a fatty degeneration of the follicular walls, and proceeds with contraction of the cavity till it is completely obliterated. The young tissue by which this obliteration is effected is considered by M. SLAVJANSKY to proceed from the white corpuscles of the blood. In regard to the formation of the corpus luteum (verum and spurium) he concludes that in this process only the so-called granulation-layer of the follicular wall is active, the membrana granulosa undergoing fatty degeneration and atrophy. In conclusion, he describes the pathological conditions of the ovary, with the exception of dropsy of the Graafian follicles. He divides them into affections of the parenchyma, and affections of the wall of the follicle. The former are included under the heads of fatty metamorphosis and colloid metamorphosis; the latter he considers may be embraced under the general head of sclerosis.

ACCORDING to an official report, the German loss in military surgeons during the war amounts to not less than 101; namely, 72 killed in battle, 25 carried off by disease, and the rest by accident. Considerable as is this sacrifice, which was greatest at Gravellotte, it is regarded at Berlin as slight compared with that in other campaigns, especially in the Crimean one.

Medical Annotations.

"Ne quid nimis."

ORGANISATION OF MILITARY HOSPITALS.

WE understand the reorganisation of military hospital services, rendered necessary by the abolition of the Purveyor's Department, is now assuming a definite shape; and that the new regulations about to be issued will extend the medical officers' authority over all matters connected with the internal working of the hospitals of which they may have charge. It has also been determined to reorganise the army hospital corps, and appoint commissioned officers to it, so as to make it competent to undertake all duties, not of a purely professional character, which have been heretofore performed by apothecaries, captains of orderlies, and non-commissioned officers, and men of both branches of the army hospital corps. All officers, non-commissioned officers, and others employed in military hospitals, will be directly under the Medical Department, and responsible to its officers for the discharge of all the various subordinate duties which are so essential to the efficient working of the hospital.

It is also believed that the principle of consolidation is to be extended to all hospitals in camps and garrisons admitting of such arrangements, and a dispensing service, with properly equipped dispensaries and well-trained dispensers, will take the place of the present cumbrous medicine chests and regimental surgeries; so that the medical officer of a corps will find ready to his hand, on entering his hospital, everything he may require for his sick, and a well-trained staff of servants to nurse them.

Other minor reforms in the method of obtaining supplies, and of accounting for them, are under consideration. If these be carried out, they will, it is hoped, relieve medical officers of much of the clerical drudgery entailed upon them by existing regulations, secure uniformity of practice in different hospitals, and place in the hands of the medical officers of the army the control of their own officers, subject only to the supervision of those who are competent to judge of the real requirements of the sick and the true economy of hospital administration.

FASHIONABLE SPORTS.

BUT a few weeks have elapsed since the public journals, and, we may fairly presume, an influential majority of their readers, were in agonies of hysterical indignation at the account given by Dr. Rutherford of his experiments upon a frog. It was quite true that the frog had been decapitated and could not feel; but this trivial circumstance was wholly insufficient to render the public insensible to the mute eloquence of its movements. We are now anxious to make a definite appeal to the unattached tender-heartedness that it was our mission so unexpectedly to discover, and to ask whether it be not possible to obtain some distinct expression of public opinion in opposition to the almost feminine cruelty into which so-called sport has of late years degenerated. The English pastimes of former periods would now be described as ruffianly; and bull or bear-baiting, cock-fighting, and the prize-ring are forbidden under legal penalties. But these sports had their redeeming features. Some of them were attended by wholesome and bracing contingencies of danger to the lookers-on; while others displayed courage and endurance in the men or animals engaged in them. Not one was comparable in cruelty to battue-shooting, or still less to that killing and maiming of hundreds of pigeons which has become the

prevailing pursuit of the idle members of the upper ten thousand, and which is attended by the peculiar evil that its influences extend to a wide circle of spectators and of newspaper readers. Fashionable ladies attend pigeon tournaments, and accustom themselves to witness unmoved the wanton infliction of suffering; while shopmen, on their half-holidays, must needs be as much like lords as the wounding of blue rocks can render them. We were the first, among the press of this country, to raise our protest against the Hurlingham massacres; and we rejoice that our example in this respect has been followed by many of the journals that commonly lead public opinion. It is quite clear, however, that enough has not been done; and that the matter needs to be again and again set forth in its true colours, deprived of the false lustre that is shed over it by beauty and fashion. Cannot the Society for the Prevention of Cruelty to Animals find materials for a prosecution in the ordinary incidents of a shooting match? Cannot respectable newspapers be induced to forego the publication of the scores that are made at these stupid and brutal contests?—comparable in their safety and their cruelty only to the dismemberment of flies or the twirling of cockchafers by children. If our golden youth must torture animals for amusement, let them at least mingle a little manliness with their indifference to the sufferings that they cause.

THE HISTORY OF DIABETES.

DR. W. A. GREENHILL, the learned author of the medical articles in Smith's Classical Dictionaries, and the editor of "Theophilus Protospatharius," sends us an interesting communication on the History of Diabetes. The name of the disease is derived from the Greek word for a syphon, because, in the words of Aretæus, the fluid does not remain in the body, but uses the same as a syphon whereby to leave it. Various other names, referring to its most prominent symptoms, such as the excessive thirst and flow of urine it occasions, were applied to it; but its special peculiarity, the saccharine quality of the urine, escaped recognition, and therefore designation, until the time of Willis, who says that in the seventeenth century, when there was much drinking of undiluted wine (*vinum meracius*), cases of diabetes were very common. Willis then proceeds to mention, as if he were the first to make the observation, that the urine of diabetic patients had a wonderfully sweet taste, as if imbued with honey or sugar. This fact has never since been lost sight of; and doubtless from Willis's having first called attention to it, diabetes of this form was termed "Diabetes Anglicus." Such was the history of the disease in Europe. It is not, however, generally known that among the Hindus, centuries before Willis's time, it had been distinctly mentioned (and not at all as if there were anything new in the statement) that the urine occasionally assumed a saccharine character, while the serious nature of the disease in which this occurs had also been pointed out. The words of Susruta (who cannot have lived later than the ninth or tenth century of our era, and who probably lived in the fifth or sixth) are as follows:—

"Mellitâ urinâ laborantem quem medicus indicat, ille etiam incurabilis dictus est..... Omnes urinales affectiones tempore incurabiles fiunt; ad mellitum urinæ statum perveniunt et tunc insanabiles fiunt."

This passage, fragmentary as it is, well merits the attention of the historian of medicine. A history of the rise and progress of medical science is an undertaking for which (often as it has been performed) the time is more than ever ripe. Not only have the Hindu and Arabian physicians been read with a thoroughness heretofore impossible; not only have the Hippocratic treatises and those of the other ancient medical writers been re-edited and re-examined by the light of a purer and more penetrating scholarship; but, as Dr. Chambers must have conveyed to the hearers of his Harveian Oration, those antique records have gained in interest as modern medicine has advanced in detail and doctrine. Dr. Greenhill would lay the scientific world under a signal obligation if he would devote his great familiarity with the literature of medicine to a consecutive history of its origin and development.

MEDICAL EDUCATION IN BERLIN.

"A MAN of science without German is like a man of letters without Greek," is a saying to which ample confirmation has just been given by Dr. W. T. Gairdner, of Glasgow, in a couple of lectures on "Medical Education in Berlin." In the first of these the lecturer described with much fulness of detail what he had witnessed in the clinical wards of Professor Traube, who conducts with a success European in its celebrity the "propaedeutische Klinik," at the Charité Hospital. The second was occupied with an explanation of the fact that in medicine (as, indeed, in almost every walk of inductive research, to say nothing of moral and metaphysical speculation) the Germans have long taken the lead. Having shown that this is a necessary result of a State system wherein the principle that no one can be permitted to be ignorant, or to reach manhood untrained to be of service to the public, has ruled the whole methods of primary and secondary education, Dr. Gairdner proceeded to prove that in Germany the medical students begin upon a higher platform than ours, disciplined even in the gymnasia and "Real-Schulen" into habits of accurate thought, and informed, not only in several languages, ancient and modern, but in something more than the rudiments of those sciences on which all medical education is grounded. All enlightened practice in medicine being based upon pathology, and all pathology upon physiology, microscopy, and chemistry, let us ask ourselves, said Dr. Gairdner, is it from this country that we receive our chief discoveries in these subjects? or are our methods of pursuing them such as to lead in the long run to our holding an advanced position in them? The answer to these questions he takes from the admirable monograph on "Inflammation," by Dr. Sanderson, who says, "It is hard to have to acknowledge that during the last ten years no research of any importance relating to the questions which will occupy us in the following pages have appeared in this country." And why? Because nowadays every important advance in the science of disease is made, not by the collection of isolated observations, but by the same methods of systematic experimental research which are employed in physics and chemistry. The Pathological Institutes of Vienna and Berlin have no counterparts in this country. The necessity for similar institutions among ourselves was ably enforced by Dr. Gairdner, desiderating as he does in nearly all our medical schools a physiological and pathological laboratory, where instruction in the analysis of the human or animal body, its secretions and excretions in health and disease, may be continuously pursued, along with investigations into the properties of remedies and of poisonous substances. To profit by such a course, however, Dr. Gairdner showed that a preliminary education like that enjoyed by every German student before beginning his professional studies should be available for the English one. Side by side with the classical discipline, which Dr. Gairdner, himself an accomplished scholar, would wisely retain, should proceed the cultivation of the observing and reasoning faculties on subjects like botany, chemistry, physics, or natural history. In all our public schools, and in the Arts curriculum of our univer-

sities, education should be conducted on this plan, with the certain result that in no long time the German *savant* will say of medical science, what Professor William Dindorf, of Leipsic, said of classical learning: "Give an Englishman the same amount of acquisition as a German, and he will make a better use of it."

CONVERSAZIONI.

WE are inclined to think that social gatherings, like those which take place annually at the College of Physicians, the Royal Society, the Pharmaceutical Society, the Society of Arts, &c., might be multiplied with great advantage. The pleasure and instruction afforded to the visitors are altogether beyond the cost, whilst the association of members of the same College, although for but a single evening in the year, gives a vitality to the connexion which is sadly wanting in the case of our medical corporations. Men pay their fee to the College of Surgeons, and from that moment they neither enter its walls nor derive any further benefit from its magnificent museum. But if on two or three occasions they could be brought together for the purpose of pleasant mutual intercourse—to examine the latest inventions in science, and the latest novelties in physiology and pathology; if with the Fellows they had the opportunity of chatting about medical politics and things in general, we cannot but believe that jealousies would be softened down, and that a wider spirit of charity would grow up amongst us.

Isolation is the bane of our profession. The clergy have their visitations and missionary meetings, and the members of the bar are associated daily in the courts; but medical men pursue their profession almost alone, and the meetings of the various societies are too prosy to seduce from the quiet fireside any except those who possess the true zeal. The expense of such meetings need not be great; and if the Colleges are too poor to provide tea and coffee, the visitors may well be content with purely intellectual entertainment; otherwise tickets might be issued to the members at a charge sufficient to cover the outlay. The College of Physicians might then afford to invite the Licentiates, as well as the Members and Fellows, and to give a larger class the pleasure and instruction to be derived from the very interesting collection which is brought together on such occasions.

HYDATID OF THE LUNG.

THIS is so rare a disease in this country that most practitioners have never seen it. But it seems to be very common in Australia, if we may judge from an interesting paper on the subject by Dr. L. D. Bird, of Melbourne, read before the Medical Society of Victoria, and published in the March number of the *Australian Medical Journal*. The most common site of pulmonary hydatids is the base of the lung. If the cyst is small or of moderate size, it may occasion no symptoms, and remain unnoticed; when symptoms do occur they are those of mechanical pressure or irritation. The physical signs vary according to the size and locality of the sac. Unless the tumour infringe on the chest-wall the percussion-note is not altered, but respiration is harsh and puerile or defective. The rarity of visible venous engorgement is, in Dr. Bird's opinion, a feature which distinguishes the case from one of intra-thoracic cancer. If the cyst has originated near the surface of the lung, and is large enough to press on the chest-wall, the limited dulness and other physical signs of fluid will be noticed. The case is to be differentiated from pleurisy, abscess, or phthisis by careful limitation of dulness, the situation of it, and the symptoms and general history of the case. The existence in the sputum of echinococci and portions of cyst would of course be verifying. But this evidence is not available in the early stages of the disease. Hydatids and phthisis often co-exist, and it is not always possible to pronounce a positive diagnosis. Dr. Bird claims credit for Victorian surgeons of showing the propriety and harmlessness of tapping these cysts in the lung. In Dr. Bird's experience the first tapping, followed by medicines calculated further to injure the vitality of the parasite, of which bromide or iodide of potassium and kamela are preferred, is so often successful that he has ceased to take notes of such cases. A discussion followed the reading of the paper. There seemed but one opinion as to the frequency of the disease in the colony, and it was generally attributed to the pollution of drinking-water by the excreta of dogs containing the ova of tænia.

PAROCHIAL CHEMISTRY.

THAT chloride of calcium and many other salts absorb water from the air, and that aqueous solutions of such salts will not dry up at the ordinary temperature of the atmosphere, even in summer, are facts so certain and so familiar as to have wellnigh acquired, in the estimation of chemists, the rank of necessary truth.

We learn that a civil engineer in the employ of one of the London vestries has made the discovery that a solution of deliquescent chlorides dries up as fast and as completely as pure water when exposed to the action of the summer sun. The locality in which so important an observation was made is the parish of St. George's, the occasion being the laying down of Mr. Cooper's deliquescent salts in the streets of that parish. We understand that the labourers employed under the distinguished engineer in question have made the still more remarkable observation that these deliquescent salts accelerate the evaporation of water. It appears that that which passes current among chemists relative to the properties of deliquescent salts is regarded by the eminent engineer in question as purely theoretical, as distinguished from his own observations and those of his men, who observe practical facts.

POOR-LAW MEDICAL OFFICERS AND PUBLIC VACCINATION.

WE direct attention to a letter in another part of our present issue on the important subject of the relation of Poor-law medical officers to public vaccination. The duties of such officers during the present epidemic must be as unenviable as they are unprofitable; and their disabilities in the matter of vaccination must be as painful to themselves as they are disastrous to the poor, and costly to the public. It will not remedy the evil illustrated by our correspondent's letter to allow the Poor-law medical officer merely to vaccinate those living in the house where he happens to have a small-pox case. He should have general power to vaccinate all within the district, and especially all within the sphere of the wholesome appreciation of vaccination which is generated by small-pox. We venture to hope that such shocking illustrations of the results of imperfect vaccinating powers in Poor-law medical officers will have their effect on members of Parliament and on the authorities of the Privy Council, and through them on the imperfect Bill now before Parliament. The case in which a child was taken, within two days of the time of the coming out of small-pox eruption, to a public vaccination station to be the source of lymph for the vaccination of other children, will show the wisdom of having the households affected with small-pox entirely under the care and responsibility of one man. And the spreading of the disease to the houses of neighbours will show the propriety of giving the Poor-

law medical officer power to vaccinate all and sundry. It will be noticed that when vaccination is neglected the neighbours and other members of the household take small-pox and go to the hospitals—at a cost, by the way, of three guineas each,—and perhaps die, leaving their families a permanent burden on the rates.

THE PHARMACY BILL.

THE date of the second reading of the Pharmacy Bill appears to be somewhat uncertain, but there can be little doubt that, late as the period of the session is, the Government will do their best to make its provisions law before the House of Commons separates for the holidays. The pharmaceutists declare their intention of fighting the question out. At the last meeting of the Council of the Pharmaceutical Society it was decided to offer every opposition to the passage of the Bill. Of course, indignation meetings have been held in different parts of the country. Last Saturday a deputation waited upon Mr. Forster, who asked, in the first place, whether those who came to see him were prepared to discuss the Bill, or had decided only to offer it opposition. On hearing that the latter course was to be followed, Mr. Forster declined to inform the deputation what amendments he was disposed to accept, and intimated that the Government were prepared to carry the Bill.

We hope that Mr. Forster will not be induced by any circumstance to alter his present determination. The Bill is a most moderate one. Its provisions are calculated to inflict not the slightest hardship, not even necessarily any inconvenience, upon pharmaceutics, whilst they will only just secure for the public that amount of protection against accident in the matter of the handling of poisons which they have a right to expect, but which does not exist. We are by no means sure that the Privy Council ought not to propose the appointment of inspectors in addition.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE final meeting of this Society for the session was held on Tuesday evening, and commenced by the reading of a report from the committee appointed to examine Mr. Hutchinson's cases of vaccino-syphilis. After this came a paper on Dextral Pre-eminence, by Dr. William Ogle, in which the author brought forward evidence to connect the superior powers of the right extremities with a more complex development of the left cerebral hemisphere, and showed that, in two cases of left-handedness, the greater cerebral complexity was found on the right side instead of the left. The discussion which would doubtless have followed was rendered impossible by the pressure of the remaining work; and, after a few remarks by Mr. Savory and Dr. Charlton Bastian, the Society proceeded to hear papers by Mr. Spencer Watson, Dr. Nunneley, and Mr. Francis Mason. None of these were followed by any remarks; and the Society adjourned at its usual hour.

MONTE GENEROSO.

SHOULD any of our readers be at a loss to select a health-resort for convalescent patients, or for invalids requiring thorough change and lengthened repose, we would recommend the Monte Generoso, a low and easily accessible mountain, situated between the Lakes of Lugano and Como. It is sufficiently near to the higher Alps to obtain the benefit of their cool and exhilarating breezes, and yet so far away as to escape the cold and storms which are produced by the near proximity of large tracts of snow. Near the summit of this exquisitely clothed mountain an enterprising and intelligent Italian physician has erected a large hotel, and has made charming walks with gradients suitable to the powers of invalids, commanding a series of views unsurpassed in variety and beauty by any of the most celebrated spots in the Alps. The hotel is approached from the village of Mendrisio, a short drive from Como on the way to Lugano. An easy mule-path leads to the hotel, winding through English-looking lanes with real hedges, and then through rich woods of chesnuts and laburnums. There are some twelve or fourteen excursions suitable to the powers of invalids, and from May to October the weather is almost continuously fine. The variation of temperature is remarkably small, the nights being warm, and the heat of mid-day being relieved by fresh cool breezes from the higher mountains. The Generoso is a very dry mountain. The soil is a Jurassic limestone. The rain sinks through the cracks and fissures, to reappear at the base of the mountain as a full-grown stream. Dr. Pasta speaks English, and is well acquainted with English modes of treatment. We hope that his enterprise will meet with the success it truly deserves.

THE ETIOLOGY OF TYPHOID FEVER.

ACCORDING to an interesting report of the Sanitary Commissioner for Madras, it would appear that typhoid fever may be termed one of the endemic diseases of Bangalore, a station which has the reputation of enjoying one of the best climates in India. The first account of the existence of this disease at Bangalore is to be met with in the Army Sanitary Report for 1863, in which three fatal cases are narrated by Dr. W. Sim Murray. The occurrence of typhoid fever in India, curiously enough, did not attract the attention of the profession prior to 1853. There can, however, be no doubt that examples of this fever occurred as far back as 1843, and it is more than probable that many cases returned as remittent fever, and infantile remittent fever, were in reality enteric fever. Still, there is not any history of this disease at Bangalore before 1863. Of late years it has shown a tendency to expend itself upon the occupants of the north block of the barracks of the Royal Horse Artillery. This is attributed to the proximity of the barracks to the Ulsoor village, where the conditions favourable to the development of the fever exist in the greatest intensity. Deputy Inspector-General Dr. Barclay was inclined to connect its prevalence among the men occupying the Artillery Barracks with the water-supply, and analysis has shown that this, if not absolutely impure and unwholesome, was of a very suspicious character. The Sanitary Commissioner in his report examines into the outbreak in relation to the two theories that have been advanced by Dr. Budd and Dr. Murchison, but without being able to prove whether the disease owed its origin to its introduction, in the first instance, from without, or whether the *materies morbi* originated *de novo*. He holds, however, that, whichever theory be accepted, the conditions believed to favour its incidence were present.

Among the best recorded instances of the propagation of this fever by contagion we may briefly refer to one adduced by Dr. Austin Flint, in his Treatise on the Principles and Practice of Medicine. A stranger, who had been sick for several days, stopped from off a stage-coach at a tavern in a little village eighteen miles from the city of Buffalo, called North Boston. "The village consisted of nine families, closely grouped together around a tavern. All these families save one, named Stearns, used water from a common well, and visited the sick stranger at the tavern. Prior to the arrival of this stranger there had been no typhoid fever there, but twenty-three days after his arrival a member of the landlord's family was taken down with the

disease. Other cases quickly followed, and in a month, more than one-half the population, numbering forty-three, had been affected, and ten had died. Stearns's family, being on ill-terms with the tavern-keeper and most of the other families, who were his tenants, did not visit the sick stranger, and had been forbidden the use of the common well, and as they alone, of all the families immediately surrounding the tavern, escaped the disease, he was accused of poisoning the water of the said well,—a charge which chemical analysis showed to be entirely unfounded." Dr. Flint says that he examined several of the cases while in progress, and made a post-mortém examination of one case, and found the "Peyerian patches ulcerated and the mesenteric glands greatly enlarged," and that the disease was undoubtedly typhoid fever. It would scarcely be possible to devise an experiment which would better test the communicability of typhoid fever by contagion than this.

PHYSICAL EDUCATION IN SCHOOLS.

PHYSICAL EDUCATION in boys' schools does not receive the attention it deserves. Considering what we have more than once said regarding the utility of introducing a system of military drill into boys' schools, we were much gratified to find that something has already been done in this direction. Last week 4000 lads were reviewed by Prince Arthur and the Prince of Teck in the Royal Horticultural Gardens, in the presence of several officers and others interested in the physical and intellectual training of the rising generation. The assembled boys were drawn from three classes—the Royal Naval School at Greenwich, the new London district schools, and the third from such institutions as the Marine Society and the Homeless Boys' Institution. The boys belonging to the State endowed school and those from the Marine Society's Institution looked the best. Instead of compelling boys to prepare long tasks between school hours or during half-holidays, a method of punishment so commonly adopted in schools, by which lads are deprived of the air and exercise that they require on the score of health, it would surely be far better to subject them to a little extra drill for the same purpose. We cordially concur with General Eardley-Wilmott in thinking that drill is an admirable plan for physically training and developing the frames of youths, and wish with him that a similar system were introduced into every school in the kingdom, and especially that it should be a part of the training adopted in schools of the higher orders.

THE SHIPPING AND SMALL-POX.

A BRIG arrived at Grimsby, a fishing smack at Hartlepool, a schooner at Fleetwood, and a schooner at Weymouth, with cases of small-pox on board. Such is the week's report of small-pox among the shipping. Sometimes the sick sailors are not allowed to land, sometimes the vessel is put into quarantine, but at other places no such restrictions exist, and at Grimsby the inhabitants appear utterly indifferent as to the epidemic. For, according to the *Shipping Gazette*, the infected are publicly landed, and, with their clothes, taken to their homes. How many unrecorded cases have occurred in our mercantile marine it is impossible to tell; but it is a fact that nearly all those that have been discovered came from the port of London. We know that the constant dropping of water will wear away stone, and we may, perhaps, hope that the constant jottings which have appeared in this and other journals on this subject, as well as particulars that have been sent to head-quarters from several outposts, will sufficiently impress the official mind with the now well-authenticated fact that the epidemic is being extended and perpetuated in our waterside towns mainly by means of the coasting vessels, as the present sanitary condition of Newcastle-on-Tyne, Southampton, Great Grimsby, and Hartlepool, most emphatically testifies. It is, however, cheering to know that small-pox is beginning to trifle with the pockets of our shipowners, for the Spanish Government compels all vessels arriving from the Tyne to perform a twenty-one days' quarantine. When a few other nations have followed this laudable example, our "health authorities" will be requested to provide a remedy.

DR. LIVINGSTONE.

ON Monday, the 26th ult., the Royal Geographical Society met under the presidency of Sir Henry Rawlinson, who stated that, from information received by Sir Roderick Murchison, dated Zanzibar, April 30th, 1871, Dr. Livingstone had been last heard of at Manime, a thriving ivory mart, between two and three hundred miles west of lake Tanganyika. The Doctor had been attracted thither to examine a western lake into which the waters of Cazembé flowed, and to ascertain whether these go to the west of the Congo or to the north of the Nile Basin. It is hoped (added Dr. Kirk, Sir Roderick's informant) that if the Doctor should have determined the outflow of the Tanganyika, he will rest satisfied and leave all remaining work to future travellers. Abundant supplies were awaiting him at Ujiji, while communications will have reached him there on June 1st, by the time the rains have ceased. From the position in which the Doctor was last heard of, Sir H. Rawlinson is glad to know that he had easy access to the more civilised parts, and might, whenever he chose, bring his five years' pilgrimage to the conclusion which so many have long been wishing for.

THE DRAINAGE OF WINDSOR CASTLE.

A DISCUSSION arose in the House of Commons last week upon the voting of £15,000 for the drainage of Windsor Castle. It was objected that the works proposed for the Castle were not so planned as to combine with those which were required for the town of Windsor. The First Commissioner of Works said that no proposal in reference to drainage had been made to him by the town of Windsor, and intimated that it was better for the Castle to set a good example than to wait until the town had made up its mind what to do. This is, of course, right enough, and Mr. Ayrton is hardly to be blamed for taking advantage of the natural incline of the ground so as to make gravitation do the work of irrigation, and thus save to the British taxpayer the expense of machinery, provided a proper choice has been made of the site for the sewage disposal. It should be remembered that Colonel Ewart, R.E., has recommended the "separate system" of drainage for Windsor and other towns on the Thames—that is, small sewers for the sewage proper, and open or covered channels for receiving the rainfall and conveying it into the river. Is it not about time that Windsor took her own drainage in hand?

THE SIAMESE TWINS OUT-FLANKED.

ACCORDING to an American journal, there is an Ohio double baby which is said to surpass in curiosity the Siamese twins, or the double-headed Nightingale, whose portraits adorn the walls of our various thoroughfares. The Ohio twins have been examined by Drs. Williams and Little, and they are described as being united in a direct line from the occiput downwards along the spine. On one side are perfectly developed hips, thighs, legs, and feet. On the other side there is one large, imperfectly formed leg, presenting the appearance of the consolidation of two legs. There are eight toes on

this limb, two of which have the appearance of great toes, being much larger than the others. Each child has a well-formed head and features, good arms and hands, lungs, heart, liver, stomach, &c. The lower portion of the trunk is said to be common to both. While these physicians were making their examination both cried, but, a few minutes after, one went to sleep, while the other remained awake. When either head would cry the perfect leg which was nearest that head kicked and drew up, while the leg nearest the other head remained quiet. When either cried, the toes on the imperfect foot would move, but the limb remained stationary. The child is, or rather the children are, in excellent health. The physicians could see no reason why it, or they, should not live.

BUST OF PROFESSOR CHRISTISON.

THE Nestor of Scottish Medicine has just received a tribute which we are sure must have gratified him much. On Thursday, in presence of the Lord Justice-General the Chancellor of the University of Edinburgh, Sir Alexander Grant (the principal), the Senatus Academicus, and others, a bust of the distinguished physician obtained a niche in the College Library, while a replica of the same was also presented to the members of his family. As a work of art, the bust is in all respects worthy of the sculptor, Brodie, who has rarely succeeded in rendering with finer effect the lineaments of so estimable an original. The proceedings, which were of a highly interesting character, will be described next week.

THE ADULTERATION BILL.

THE *Birmingham Daily Gazette* prints a letter received by Mr. Postgate, of Birmingham, from Mr. Muntz, M.P., in which the latter states that he was compelled to withdraw the Adulteration Bill because, being opposed, it had no chance of coming on in the House of Commons before July—of course too late to have any chance of passing this year. Mr. Muntz considers, however, that progress has been made, and that next session the Bill will have a fair chance. We should be more hopeful of this could we be certain that before next session the Home Office will be occupied by a minister whose support, unlike that of Mr. Bruce, is less fatal to a measure than his opposition.

THE MEDICAL COUNCIL.

THE most important subject which is likely to engage the attention of the Medical Council at its meeting next week, is that of Medical Education. Our readers will remember that two years ago a committee was appointed to consider this question, and that it was re-appointed last year. The report of this committee will form the basis of discussion.

LINCOLN SEWERAGE.

THE local board of this city seem to have but a poor opinion of the Home Office; at any rate they have for some time past acted as though they thought the Home Secretary was a man slow to do if apt to consider. It will be remembered that an inquiry was several months ago held by Mr. Arnold Taylor into alleged sanitary defects at Lincoln, and that the result of his report was an order requiring the local board to undertake certain works within a specified time. There has been plenty of talk subsequently about the matter at various meetings of the local authorities, but that very little has been done is evident from the fact that the Secretary of the Local Government Act Office, writing under date of the 16th June, informs the local board that, the time given by the Secretary of State having expired, he will issue a final and compulsory order unless the board "will relieve him of this unpleasant duty by themselves undertaking to carry out the needful works of main-sewerage and sewage outfall and disposal." This threat has led to the formation of a local committee to ascertain the best means of sewering the city, who are to report within a month; so that at last it seems probable something will really be done.

ANDERSON'S UNIVERSITY.

GLASGOW deserves κῦδος for her enterprise in education. The Andersonian University, having lately added a Chair of Technical Chemistry to its professoriate, is about to establish another Chair of Applied Physics, and an offer of £2000 has already been made towards this object; while five scholarships in connexion with the former will be founded of the yearly value of £50 each. The number of its students is, as might be expected, on the increase, 2640 being the number during the last year—that is, 99 more than the year preceding. A College of Technology is also in contemplation.

BRITISH MEDICAL BENEVOLENT FUND.

AT the usual monthly meeting held on Tuesday last, grants to the amount of £90 were made to nine applicants for assistance, and an annuity of £10 was voted in the case of a disabled member of the profession, to qualify him for one of the vacant houses at Providence-place, Chippenham. A warm vote of thanks was passed to Dr. Gull for an additional and liberal donation of £50 to the funds of the charity.

THE Guardians of St. Pancras have erected some new offices for relief purposes in the King's-road, St. Pancras-road. Besides ample accommodation for the clerks and relieving officers, there are two waiting-rooms, one for the poor receiving relief, and the other for the sick. The consulting-rooms for the medical officers are spacious and convenient, and the patients will pass through to the dispensary to receive their medicine. For years past crowds of poor people have been seen on relief days, sitting about the kerb-stones, exposed to all sorts of weather; and as the guardians have been sufficiently often called to account, it is only fair to give them credit for the very great improvement now effected.

SMALL-POX caused 128 deaths in Berlin during the week ending the 22nd of June; the total mortality of the city being 708. Dr. Zuelzer states that at the Charité Hospital he has used very largely cold-water treatment in cases of small-pox. Cold baths and wet wrappings have been employed with the best results. Dr. Zuelzer considers that this method of treatment greatly diminishes the danger of contagion.

THE system of weekly as a substitute for daily payments to soldiers introduced of late into the army does not work well. The accumulation of a week's pay places, of course, a larger sum of money at a given time at the disposal of the men, and the consequence is that young soldiers are led to indulge in the dissipation and vices to which they are exposed to a greater extent than under the older system, with injury to themselves and to discipline.

WE may direct the attention of our readers to an announcement in our columns to the effect that the twenty-sixth annual general meeting of the Medico-Psychological Association will be held at the Royal College of Physicians, on Thursday, August 3rd, under the presidency of Dr. Henry Maudsley. The members of the Association will afterwards dine at Willis's Rooms.

THE College of Physical Science at Newcastle seems likely to justify the more sanguine expectations of its promoters in March. Upwards of £22,000 has been already subscribed towards the required estimate of £35,000.

BRIGHTON is thus early busying herself for the reception of the British Association in 1872. A numerous general committee has been named, and special arrangements are in progress to attract as many foreign *savants* as possible.

IT is understood that Sir Edward Ryan will, at least for the present, discharge the duties of the Vice-Chancellor's office, vacated by the death of Mr. Grote, in the University of London.

MR. CORRANCE, M.P., has given notice of his intention to move a resolution to the effect that it would be desirable to extend the provisions of the Irish Medical Charities Act to England.

M. PAUL BROCA, the distinguished physiologist and lecturer in the College of Medicine, is among the candidates at the approaching Parisian elections.

A RAID has been made upon the anti-vaccinationists at Cheltenham, who have been summoned for disobeying the law. In all the cases convictions were obtained.

AN examination of assistant-surgeons to qualify for promotion will be held at the Naval Medical Department, Somerset House, on Tuesday, the 4th inst.

NOTES ON PROVINCIAL HOSPITALS.

THE MANCHESTER INFIRMARY.

THE city of Manchester is rich in medical charities. Besides the Manchester Infirmary there are, including that at Salford, three general hospitals, in addition to special institutions for the diseases of children, for syphilitic, and for ophthalmic diseases.

The Manchester Infirmary, however, deservedly occupies the first position, not only in size, position, and importance, but as being in the immediate neighbourhood of the medical school, and the chief place for the clinical instruction of its numerous students.

The building is in the classical style, and was founded in 1752. Improvements have been made in it from time to time, especially during the management of the present resident medical officer, Dr. Reed, at whose suggestion many of the smaller wards have been thrown together, leaving central fireplaces, and greatly contributing to the airiness and improved ventilation and sanitary condition of the hospital.

The medical wards are situate in one half, and the surgical in the other half of the building. No patients are accommodated on the ground-floor, the whole space being occupied by the out-patient department, and by the officers' rooms, offices, &c. The resident staff is large, consisting of medical superintendent, two house-surgeons, and four physicians' assistants. So large a staff is required in consequence of there being, in addition to the 270 in-patients, and a proportionate number of out-patients, a considerable amount of home visiting of patients, which duty is performed by the physicians' assistants.

There is some talk of extending the wings of the hospital laterally, but this is unadvisable, as the surrounding open space is now anything but extensive, and immediately outside the hospital area, on either side, are huge warehouses and offices, which, to a great extent, prevent the access of air or sunlight. It would be infinitely wiser to build a new out-patient department on another site, and utilise the ground-floor of the present building for accidents, which at present have all to be carried to the upper floors. Many the accidents are now kept in a wooden annexe in the rear of the hospital, which was originally constructed for the accommodation of fever patients, but which is not used for that purpose owing to the remonstrances of the merchants and manufacturers, whose premises are in the vicinity of the hospital, and who naturally feared that they or their numerous employés might suffer from infection. The fever cases are now treated in the topmost wards of the hospital, but will be removed shortly to the "Barnes" Fever Hospital, which is now in course of erection, and which will in a great degree add to the completeness, as well as contribute to the healthiness, of the present hospital. Every endeavour is made to prevent the accident cases suffering by removal from the basement to the upper floors, a capitally constructed bed on wheels (made by Cockshott, of Manchester) covered with india-rubber, and provided with springs, being used for that purpose. The floors of the wards are waxed and dry-rubbed. Erysipelas and pyæmia are said to be rare.

Fractures are abundant, and are treated on the old principle; those of the leg with side splints, a starch case being put on at the end of a month. Machinery accidents are of frequent occurrence. In the treatment of wounds carbolic acid is used extensively by Mr. Lund, while Mr. Southam appears to prefer the tincture of benzoin.

There are no separate wards for children or for burns, and consequently the odour common to burn cases is more or less prevalent in most of the surgical wards.

Erysipelas and pyæmia cases, being infrequent, have no special place allotted to them; but should either disease spring up in a ward, all the other patients are at once cleared out, and the ward as soon as possible submitted to a thorough cleansing.

Many cases of interest were under treatment at the time of our visit, including excisions of the knee and elbow; for the former, Dr. Patrick Heron Watson's splint, and plaster-of-Paris apparatus were employed, and with tolerably good results. Heath's splint is not used after the latter operation, but the arm is laid on a pillow in an easy position, and movement is commenced in about ten days.

One case which is deserving of special notice was that of a man with fracture of the skull with depression, who survived the accident, but who continued to suffer from intense headache for many months. The agony he endured was so great that he was content to submit to any operation, and accordingly trephining was performed at the seat of injury, immediately over the superior longitudinal sinus (which, however, was not opened), and with perfect relief of the patient's symptoms, and without the production of any constitutional disturbance. Lateral lithotomy is frequently performed; one case, in a man aged seventy, was doing well.

For the relief of stricture external urethrotomy is the favourite operation, Holt's operation being rarely done in consequence of one or two unsuccessful cases having occurred, though not during the present house-surgeon's term of office.

Ovariotomy is rarely performed, and there is no special officer for the diseases of women.

The physicians' wards well repay a visit, but their consideration must be deferred for the present.

THE ADVANTAGES OF POOR-LAW DISPENSARIES.

WE have been requested to recapitulate the advantages of Poor-law Dispensaries. They may be reviewed from a public and a professional point of view.

They secure prompt and adequate medical attendance on the sick poor, and they likewise tend to raise the professional position of the Poor-law service. It is not denied that the sick poor may and frequently do obtain all that they require under the existing system; but there is no absolute security that they do so, and it cannot be doubted that the parish doctor does not generally enjoy a very high degree of confidence, and that the sick poor are in the habit of going to public hospitals and dispensaries under the impression that they there get better advice, more attention, and a more liberal supply of drugs. The dispensary system

not only provides, but secures, the personal advice of the medical officer or of his legally-appointed substitute. Neither apprentices nor unqualified assistants can attend without the knowledge of the guardians. The poor may have a little farther to go to the dispensary than they have to the surgery of the medical officer, but when they arrive they will be sure to find him at the hour appointed, and they will not be kept waiting. In the next place, the sick poor have the great security of being properly examined, which is afforded by a written prescription. This can be produced at any time as evidence that the patient was really seen by the medical officer, whilst the latter is equally protected by it from false charges of neglect. Then the order given to the medical officer to visit the patient "at home" prescribes his duty in this respect exactly, and at each visit he must enter his prescription on an official paper; so that the poor have the certainty of being visited as often as the gravity of their cases require, whilst the medical officer has also the opportunity of referring to a written record of his labours, by which he will be enabled to put in an unanswerable claim for adequate payment.

The dispensary system removes every temptation from the most inadequately paid medical officer to employ inferior drugs or to administer a scanty supply of medicine. It has been shown that many Poor-law medical officers would expend all their salaries in drugs if they treated their patients in the same way as the honorary medical officers of hospitals and dispensaries do. Guardians are now generally compelled to find drugs for the sick in workhouses, and the same arguments apply with even stronger force to the case of district out-door poor. But this can only be done by the establishment of Poor-law dispensaries. Objections have been taken to the supply of drugs by contract; but the medical officers of dispensaries are called upon, in the recent regulations carried out in London by the Poor-law Board, to certify to their purity and sufficiency. Some difficulty having been experienced in Ireland only affords an argument for the proposal of the Irish Poor-law Commissioners in favour of the appointment of a supervisor of these contracts.

From a professional point of view the dispensaries will tend to raise the character of the Poor-law service. The medical officers will no longer have the drudgery of dispensing medicines. From huckstering apothecaries, always labouring under the imputation that they have an interest in not giving a sufficient supply of the best drugs, they will be raised to the position of physicians and surgeons whose sole duty is to advise and act. This position is realised in Ireland, where successive presidents of the College of Physicians have been Poor-law officers. The whole service will be raised by the fact that its reality and efficiency will be guaranteed to the public by their regular attendance at the dispensaries, and by the written records of their prescriptions and home visits. It is by this means alone that the public will be able to realise the value of their labours, and be led to raise their rate of remuneration to its proper standard.

With respect to midwifery, every dispensary will have attached to it a certificated midwife, and the medical officers will be called in as consultees in difficult cases, receiving the fee according to the Poor-law scale of extras.

We would remark that several dispensaries have been in action in the metropolis for many years, and that some of those recently opened have very perfect arrangements. If good for the metropolis, it appears to us that they will be equally so for the large towns. There have been difficulties in finding suitable sites, but this we believe the guardians will find a means of getting over, if they are really in earnest.

It would be improper to conclude this statement without drawing attention to the economical advantages which Dr. Rogers has attributed to the prompt relief of sickness amongst the labouring poor. No one doubts the close connexion between sickness and pauperism, and we believe that no public system of direct relief is safer or more really economical than the one of public dispensaries. We are no advocates of unlimited gratuitous medical assistance, and all good plans are obnoxious to abuse. There will be need of great discrimination on the part of relieving officers, and of close supervision on the part of guardians. But not the least advantage of a good public system of medical relief will be, that it will remove the excuse for the abuse which now so extensively prevails at free hospitals and dispensaries—an abuse which robs the most needy and industrious members of the profession at the expense of the self-respect of thousands who can well afford to pay. We hope, therefore, that guardians will not hesitate to adopt the system of dispensaries, and that they will not be deterred by difficulties which may be overcome by a little energy on their parts; whilst it is especially important that there should be no division of professional opinion on the subject—all doing their best to forward a scheme which must result in their permanent advantage.

PROPAGATION OF SMALL-POX.

DR. JONES has taken advantage of the recent outbreak of small-pox in St. George's Hospital to investigate its mode of propagation. The patient first seized had visited a friend suffering from small-pox on the 10th of November, and the eruption was discovered on the 25th, sufficiently near to make it tolerably certain that the disease was taken at this visit. The sheets of this patient's bed were changed on the 24th of November, and were sent to the laundry without disinfection, before it was suspected that she had small-pox. They were returned to the hospital on Thursday, December 1st, and placed upon the beds.

Two fresh cases were discovered on the 14th, and Dr. Jones is of opinion that they were infected through these sheets. In one at least of these cases the sheets were again sent to the laundry without undergoing disinfection, and they were returned and put on the beds on the 23rd of December. Thirteen days after this, viz., on January 5th, there were three fresh cases, and four days afterwards, on the 9th of January, seven more. The last case was discovered on the 15th of January, and was therefore infected on the 2nd, when clean (?) sheets were also put on the beds.

The following very important practical lessons are deduced from the foregoing statements:—

1. That the disease is communicable before the appearance of the eruption.

2. That the ordinary washing and boiling is not sufficient to destroy the fever-poison.

3. That the linen should be disinfected by any of the ordinary disinfectants.

We confess to having great doubts as to the correctness of this explanation. In the first place, it supposes that the contagion was communicated to the bed-linen before the appearance of the eruption; that is, before there was any material discharge from the skin likely to attach itself to the sheets. Thus the particular pair of sheets thus slightly infected must have leavened the whole mass of dirty linen sent from the hospital, for the second case was not produced by the sheets belonging to the first, but by sheets belonging to another ward, which had been merely sent to the laundry the same week. Thirdly, the sheets are said to have been boiled, and it requires very strong proof before we can accept it as an established fact that contagious matter is not destroyed by boiling. Lastly, as yet we have no positive evidence of a sufficiently extended and reliable character to show that any of the ordinary disinfectants would exert a greater power in destroying the contagion than the process of *boiling*, or, better still, prolonged exposure to dry heat, with fresh air and sunshine.

Dr. Jones has not accounted for all the cases, and Case 4 in particular could not have been infected by the sheets first sent, as the eruption was discovered on the 5th of December, only three days after their return from the laundry. The infection must have been taken from patient No. 1, whilst she was under treatment in another ward. There is also some difficulty in tracing the contagion in some of the later cases, and if through the sheets, the contagion must have been received in the linen store-room.

Under these circumstances we think it impossible to exclude the probability of the disease being communicated either by direct means, or by the air of the corridor, with which so many of the wards communicate. At all events these contingencies must be taken into consideration in estimating the value of the evidence.

The question, therefore, for the present, must be considered *sub judice*. It is one of great importance, and it would be desirable for a systematic investigation to be made under the direction of the Government.

YELLOW FEVER IN BUENOS AYRES.

OUR latest intelligence from Buenos Ayres is dated the 16th May. It brings the welcome intelligence of the virtual cessation of the epidemic of yellow fever. The recrudescence of the pestilence, reported in our impression of the 17th ultimo, extended from the 25th April to the 1st May. Since that date the mortality had steadily declined to the 10th May, the time of the last official returns. We are now enabled to present our readers with the official returns of the number of deaths from yellow fever in the city of Buenos Ayres from the 27th January to the 10th May inclusive. They show a total loss of life of 13,402—a total happily less than the least of the estimated numbers (18,000) given in a previous report (THE LANCET, 17th June), but, unhappily, too formidable to make us desire to enter into the controversy as to the trustworthiness of the official records. There would seem to be no question that at least the 13,402 persons entered on the burial lists as having died from yellow fever during the progress of the epidemic, did die from the malady; and it may be accepted that not a few individuals who lost their lives from its ravages were interred without record at the time, when the confusion from the spread and deadliness of the pestilence was at its highest, and when the urgency of the need to bury the corpses interfered with accuracy of entry in the burial registers. The mortality, as stated, is sufficiently large to sate the most rapacious appetite for horrors, without calling in the aid of the imagination to augment it. For (to show its magnitude by way of comparison) if the deaths from cholera in London during the epidemic of that malady in 1866 had been at the same rate as the deaths from yellow fever in Buenos Ayres according to the official returns, the metropolis, in place of losing 5500 lives, would have lost considerably above 200,000.

The following is the official return of deaths from yellow fever in Buenos Ayres from the 27th January to the 10th May, 1871, inclusive:—Week ending February 3rd, 12; 10th, 26; 17th, 69; 24th, 101; March 3rd, 237; 10th, 671; 17th, 1151; 25th, 1151; 31st, 1900; April 7th, 2339; 14th, 2791; 21st, 1372; 28th, 851; May 5th, 540; 6th to 10th, 157. Total, 13,402.

The daily mortality during the week when the pestilence was raging with greatest severity was as follows:—April 8th, 430; 9th, 501; 10th, 503; 11th, 361; 12th, 427; 13th, 293; 14th, 276.

Two deaths from "cholera" were recorded in the course of the outbreak; one on the 11th of February, the other on the 28th March. *Apropos* of this disease, we may remark that later reports from the interior to Buenos Ayres state that although cholera had been prevailing at Corrientes, it had not spread so widely or so fatally as the earliest news of the epidemic existing there asserted. Some correspondents, indeed, aver that the epidemic at Corrientes has not been cholera at all, but yellow fever.

The compelled holiday in Buenos Ayres came to an end on the 16th May. The inhabitants were flocking back to the city at that date, and business was being resumed. It is hardly to be wondered at, having regard to the disastrous effect the pestilence has exercised upon the prosperity of the town and the means of the greater number of its inhabitants, that a fretful spirit appears to have possessed all parties. The local government, the press, and the public appear to be indulging largely in recriminations each of the other as to things done or left undone during the pestilence. With the opening of the port, and the resumption of trade, a better spirit no doubt will come; and it is to be trusted that the city will then soberly devote itself to a process of thorough cleansing and to the construction of necessary works of water-supply and sewerage.

The English community, it is reported, has suffered very severely during the pestilence, not less than 300 of the individuals constituting it when yellow fever broke out having been swept off.

CHOLERA IN RUSSIA.

THE *Voiz* makes the following observations on the state of the epidemic in St. Petersburg.

"We are at the end of the month of May [O.S.; 11th June, N.S.], and still cholera persists, in a slighter and less deadly form it is true, but cholera nevertheless. A month ago, at noon on the 17th April [29th], there were 71 cases of cholera under treatment at the five principal hospitals of the city. In the course of the week following 67 more cases were admitted, 31 cases were discharged recovered, and 8 cases died; 49 cases remaining under treatment at the end of the week. During the last week of April [6th—12th May] the admissions were 19, the recoveries 27, and the deaths 7. On the 1st May [13th April] 34 cases remained under treatment. The returns for the first eight days of May [13th to 20th] were not less satisfactory, the admissions within this period numbering 10, the recoveries 16, and the deaths 6; the number of cases under treatment on the 8th [20th] having diminished to 22. But not unfrequently, if cholera takes two steps backwards it will make one step forwards, and during the week from the 8th to the 15th [20th—27th May] there was a recrudescence of the epidemic, the number of admissions to the hospitals increasing to 21, double that of the preceding week. The recoveries in this week were 11, and the deaths 9. During the three following days [28th—30th] the admissions were 15, the recoveries 3, and the deaths 3. At noon on the 30th, there were 32 cases under treatment. Cases of *foudroyant* cholera, we may add, are rarer, and the disease yields more readily to treatment. But the epidemic continues, and although it is decreasing, it may at any moment, under favourable conditions, extend again. Among the conditions favourable to its spread must certainly be ranked the humidity of the last three weeks. The weather, however, has, at last, as we write, cleared up."

From Moscow, the latest returns of the progress of the epidemic are as follows:—May 31st, 19 cases, 8 deaths; June 1st, 68 cases under treatment; 4th, 18 cases, 11 deaths; 5th, 17 cases, 6 deaths; 9th, 9 cases, 11 deaths; 10th, 71 cases under treatment.

According to the latest returns from St. Petersburg, the number of cases of cholera in the city from May 29th to June 11th was 79; of these, 32 recovered and 38 were fatal. Number of cases under treatment June 11th: males 77, females 66. Total 143.

Total returns from August 29th, 1870, to June 11th, 1871, inclusive:—

	Males.	Females.	Total.
Cases	3034	1588	4622
Recoveries ...	1692	917	2609
Deaths.....	1252	596	1848

THE SMALL-POX EPIDEMIC.

THE general mortality from small-pox has declined somewhat, but the death-rate is fearfully high in Sunderland, where, of 76 deaths, no less than 43 were due to small-pox; 15 deaths in one district were of persons not vaccinated. In Great Grimsby the small-pox caused 14 deaths, raising the total since April 1st to 162, or at an annual rate of 24 per 1000 of the recently enumerated population. The Registrar-General reports that the fatal cases of small-pox in London, which in the two previous weeks had been 245 and 240, declined last week to 232. In seven permanent and temporary hospitals for this disease 106 deaths were recorded last week, of which 49, 23, and 25 respectively occurred in the institutions at Hampstead, Homerton, and Stockwell. After distributing these deaths, it appears that 30 belonged to the West group of districts, 53 to the North, 20 to the Central, 38 to the East, and 91 to the South. The fatal cases showed an increase in the West and South of London, while they had declined in each of the other groups of districts. The greatest fatality from small-pox was shown last week in Battersea, Clapham, and Southwark. The report of Dr. Bridges shows that the number of fresh cases in the metropolis has declined everywhere except in Marylebone and Paddington. It is satisfactory to find that

the proportion of unvaccinated people admitted to the small-pox hospitals is steadily declining, but it is a sad reflection on the general character of the vaccination which has hitherto been general, to be obliged to admit that many so-called vaccinated persons have been admitted with small-pox of the hæmorrhagic type and have succumbed. It is really most important that greater attention should be paid to this subject; for the worst enemies of vaccination are those who perform it ineffectually.

HOSPITAL ACCOMMODATION.

There has been a steady increase in the number of vacant beds in the metropolitan small-pox hospitals. There were 200 vacancies on the 10th and 300 on the 17th of June. The moorings of *The Rhin* are all ready, and the ship could be brought up and occupied in the course of forty-eight hours. But she will remain at Sheerness unless the epidemic should increase. The *Dreadnought* is fully occupied, and has afforded very great relief to the Homerton and Stockwell hospitals.

Correspondence.

"Audi alteram partem."

THE BRITISH MEDICAL ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I have the honour to request publication of the accompanying correspondence, and to subscribe myself,

Your most obedient servant,

Broad-street, Birmingham, June 26th, 1871. SAMPSON GAMGEE.

Broad-street, Birmingham, June 24th, 1871.

MY DEAR SIR,—The more carefully I consider the notices of motion for the next annual meeting of the Association, published in your name in the *British Medical Journal*, the more deeply am I impressed with the sense of their great importance.

The laws of the Association are, I believe, twenty-seven in number, and of these no less than twelve are affected, several radically, by your notices of motion. I think our Association might be assisted in forming a correct estimate of the changes you propose to effect, if you deemed it advisable to direct the publication, in an early number of the *Journal*, of the laws as they are now in force, and as they would be if your notices of motion became law.

It appears that you propose that the secretary shall no longer be a member of the Council, or of the Committee of Council, but that such officer shall henceforward reside in London, and devote the whole of his time to the business management of the Association, and of the *Journal* office. Without venturing to express any opinion on the advisability of effecting such a change, I submit that it is not merely an administrative alteration, but deeply affects the fundamental principles on which the Association was founded. When it was deemed advisable to change the name of our body from the Provincial to the British Medical Association it was generally felt to be in the interest of the profession, to maintain the independence of the Association from those metropolitan influences which have hitherto centred so powerfully in the medical corporations, and have militated in favour of the few, against the general interests of the great body of practitioners throughout the country.

The events of late years have not detracted from the urgency of arguments, formerly held to be valid, in favour of an independent organisation of the profession.

It has been stated that, as at present administered, the British Medical Association has practically become a great joint-stock enterprise for the publication of a weekly journal, which absorbs nearly the whole of the Association's income. Hitherto the independent action of the secretary, a practitioner residing in the provinces, and having a seat on the Council and on the Committee of Council, has secured to the great body of practitioners an official representative not under the control of the *Journal*; but if the secretary is to be reduced, practically, to the position of a paid clerk residing in London, and charged with the business management of the *Journal* office, as well as of the Association, he must be subordinate to the editor, or, in business matters, be co-ordinate with him in authority. The latter alteration would be incompatible with good government, while the former would inevitably lead to such a centralisation of power in the editor of the *Journal* as to render him practically, for the time being, the master of the Association.

I do not observe that you contemplate making any alteration in Law 23, concerning the audit of accounts. Hitherto it has been held, though by no means unanimously, that the independent position of the secretary and the editor, acted to some extent as a check on the financial management. If, however, you propose to make the secretary a clerk, in great part subordinate to the editor of the *Journal*, an efficient public auditor of the accounts could scarcely fail to give very general satisfaction, the more so since no official denial has been given to the rumour, current on very good authority, that the funds of the Association have lately suffered materially from the action, which I do not attempt to characterise, of one of its subordinate servants.

The British Medical Association has adopted a policy with the avowed intention of influencing the Legislature in the reform of the Medical Acts. Five of our most distinguished associates, amongst the leaders of the medical profession in the three kingdoms, have recently resigned all connexion with the Association on a question vitally affecting its management. Is it too much to presume that you have taken those facts into full consideration with your colleagues in the Committee of Council before giving the notices of motion to which I have referred? If this assumption be correct, is it not reasonable to look to you for a statement of the reasons which have led you, at so critical a period in its history, to propose such extensive organic changes in the management of the Association?

Since your proposals open up the whole question of the government of our body, it is essential that full opportunity be given for discussion, and I suggest that you give notice of a special meeting, during the approaching annual meeting, for the discussion of your notices of motion.

I intend forwarding a copy of this communication to the medical journals, but shall not do so before the 27th inst., so that I may transmit with it copy of any reply with which you may favour me.

I am, dear Sir, faithfully yours,

SAMPSON GAMGEE.

To William D. Husband, Esq., F.R.C.S., J.P.,
President of the Council of the British Medical Association.

36, Bootham, York, June 25th, 1871.

MY DEAR SIR,—The most important alterations in the laws of which I have, at the request of the Committee of Council, given notice in the *Journal*, will only be proposed at Plymouth if the members agree to the proposal which will be submitted to them to improve the business working of the Association and *Journal* office. The Committee of Council will fully submit to the Council, and if the Council approves, to the meeting, the reasons which have induced it to recommend the proposed changes in the working of the Association. These changes can in no way lead, as you fear, to metropolitan or editorial supremacy, as the election of the governing body by the members generally (so vast a proportion of whom reside in the provinces) will not be affected.

The meeting must decide when the discussion on the report of the Council shall be taken.

I had, before receiving your note, taken steps to have the proposed alterations in the laws printed in the *Journal* in a form which will render them more intelligible to the members.

I am yours very truly,

To Sampson Gamgee, Esq., F.R.S.E. W. D. HUSBAND.

Broad-street, Birmingham, June 26th, 1871.

MY DEAR SIR,—I lose no time in thanking you for your prompt and kindly courteous acknowledgment of mine of the 24th inst.

I regret that I cannot attach the importance which I generally do to your opinions, to the statement that the changes you propose "can in no way lead to metropolitan or editorial supremacy, as the election of the governing body by the members generally (so vast a proportion of whom reside in the provinces) will not be affected."

The government of the Association, professedly based on representative principles, has, so far as I am informed, no parallel in any representative assembly or society in the world. The nominally supreme Council has no control over the Association, as a distinguished associate once cogently

put it, during a recess of 361 days in the year. Whatever be the theory of our constitution—a most legitimate matter for difference of opinion—the practical effect is scarcely open to question. Take, for instance, the ensuing year, hopefully looked forward to by medical reformers; who will wield the power of the Association when the President resides at Plymouth, the President of the Committee of Council at York, the Treasurer at Bath, and the members of the Council are scattered in units over the three kingdoms, while 37, Great Queen-street, or some such central office, will be the head-quarters of the editor, and of his subordinate officer, who will combine the functions of manager of the *Journal* and of secretary of the Association? A fact not to be forgotten is that no provision is made in the laws for a public auditor, for substantial security being given by paid servants who may have the handling of the whole of the income of the Association.

I am happy to think that this discussion is not with yourself personally, for whom I have always entertained most sincere respect. You have confirmed my anticipations that the notices of motion of the most important alterations of laws have been given at the request of the Committee of Council, and I therefore hold myself at liberty to promote or take part in such measures as may be deemed necessary for bringing to an issue, on public grounds, questions which, however solved, cannot fail to exercise an important influence on the future of the Association, and on the best interests of the medical profession.

According to previous intimation, I forward copy of our correspondence to all the medical journals.

I remain, very faithfully yours,

W. D. Husband, Esq., &c. &c. SAMPSON GAMGEE.

POOR-LAW MEDICAL OFFICERS AND PUBLIC VACCINATION.

To the Editor of THE LANCET.

SIR,—You have so admirably advocated, in a leading article of last week, the claims of the Poor-law medical officers to be appointed the public vaccinators of their respective districts, that I am tempted to give you some of my late experiences as a district medical officer, who is not a public vaccinator, in confirmation of the same.

On November 18th, 1870, I was asked to see R. C——, of Mills-buildings, and found him ill of small-pox. I sent him to the hospital, and vaccinated, with lymph I happened to have with me, the father, mother, and a brother, and told the parents to get the other two brothers of the patient vaccinated at the vaccination station. It was too much trouble to take them there, I suppose, for they were not vaccinated, and both took the disease, and one of them died. Two lodgers also took the disease, and were sent to hospital. I got no remuneration for the vaccinations I performed. Had I been empowered as a public vaccinator to vaccinate the whole household, my fees would have amounted to less than ten shillings, while those who were sent to the hospital were sent at a charge to the parish of three guineas each.

On January 14th, 1871, I saw G. B——, aged six, residing in Mildmay-avenue, a small court or alley consisting of about a dozen houses, and found him suffering from small-pox. He was not removed to hospital, the parents objecting, or the hospitals being full, I forget which. I warned the parents and others to get vaccinated; yet, though they live *within a few yards of the vaccination station*, so many neglected the precaution that seven or eight fresh cases occurred there in the course of the next few weeks, six of which were sent to the hospital, entailing an expense on the community far more than six times as great as it would have taken to remunerate the medical officer for making a house-to-house visitation, and vaccinating every man, woman, and child in the place at the outset.

On February 14th, 1871, I saw S. R——, aged thirty-five, residing in Arundel-road, and found him suffering severely from small-pox, and delirious. Learning from his wife that the baby she carried in her arms was unvaccinated, I told her to go to the station that very day (it happened to be vaccination day), at 2 P.M., to get the operation performed on the child. Next morning she called on me at the district dispensary, and begged me to vaccinate her baby, as she had gone, she said, to the station the day before, leaving her husband to a neighbour's care, and, after waiting in the crowd for two hours, had returned to look to her husband without getting the operation performed. I of course vaccinated the child, and had to do it gratuitously, while the public vaccinator had, as you see, actually more cases to attend to than he could possibly manage within a reasonable time.

On May 23rd, 1871, I saw E. R——, aged one year and a half, residing in Rutland-place (a short, narrow, crowded court), and found her suffering from confluent small-pox, of which she died two days after. This was the first case I had in that court. I told the people to get vaccinated; but, considering that the vaccination station is upwards of two miles distant, and only open once a week, it is not to be wondered at that few have acted up to my advice, and that five cases (two in the same house and three next door) have since been sent to the small-pox hospital, entailing considerably more than five times the expense it would have taken to pay me for vaccinating the whole crowded court.

Contrast that with the following, occurring in private practice:—

On February 3rd, 1871, I saw J. C——, aged twenty-two, a domestic servant, residing in a young ladies' boarding establishment, and found her severely ill of small-pox, from which she died within a week after. I sent her to the hospital the day after I first saw her, and, having a good supply of lymph at the time, at once vaccinated all the inmates of the house (nine in number), who continued to reside there. The result was no other case of small-pox occurred.

The last case I would adduce to prove how desirable it is that the medical officer should be the public vaccinator of his district is this: On the 12th inst. I saw L. W——, aged fourteen, ill of small-pox, and sent her to hospital. There were unvaccinated children in the family, so I told the mother to take them at once to the public vaccinator (two miles off) to get them vaccinated, and left his address. The mother, instead, took them next day, at the risk of giving infection, to the vaccination station, as it was nearer, and said nothing of small-pox being in her house. When they returned, the week after, lymph was taken from them to vaccinate others—that is to say, lymph was taken on the 20th inst. for public vaccination from the arm of a child whom I found two days later covered with small-pox eruption. Had the vaccinator been the medical officer of the district he would have known small-pox was in their house, and not used lymph got from these children.

Such are a few specimens of the working of the present arrangements for public vaccination. Their absurdity is only equalled by their inhumanity.

In addition to the gratuitous vaccination I have performed, I have had to attend 136 cases of small-pox, ninety-two of which, after more or less attendance, have gone to hospital, and forty-four of which I have treated at home, many of the latter being of a most serious, not to say revolting, character, one being the worst form of confluent small-pox complicated with seven months' pregnancy and commencing labour, the patient dying before the child came away. I have had to report every case to the sanitary medical officer and vaccination inspector, besides making weekly reports to Dr. Bridges, signing hospital certificates, and writing reports to the Poor-law Board when necessary.

I am, Sir, yours, &c.,

Highbury, June 26th, 1871. A. D. DUCAT, M.D.

THE TREATMENT OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—Throughout the course of the visitation of the small-pox in so very virulent a type in Paris, London, and elsewhere, I have failed to observe in the public medical journals, or in the reports of the proceedings of the Pathological and Clinical Societies, any allusion to what might be considered as the most approved methods of treatment of this fell destroyer. We have had the periodical statistics of its ravages and appalling results, and the facts adduced by Simon, Seaton, and others, together with the "Report of the Vaccination Committee," just issued, upon the protective influence of that operation under efficient administration, but on the general therapeutics of the scourge by those

engaged in the work we are left totally uninformed. Disquisitions upon the modes of propagation, and the value of "Disinfectants as Auxiliary to Sanitary Measures," which formed the title of a pamphlet I published some years ago, are very necessary; but during the prevalence and abortive attempts to stamp out the plague, surely our first efforts should be directed to the safe conduct of the sick invaded, throughout its stages and sequelæ. Zymotic disease, indeed, generally must claim more of our attention; for whilst during the last six years, from 1864—9, the proportion of deaths from this class to the total mortality registered is 22·5 per cent., the years 1870—1, when computed, will disclose a vast increase, and any contribution to the stock of knowledge in this department will be, *quantum valeat*, hailed with satisfaction.

From epidemic scarlatina we have lately suffered very severely, and found it very fatal and intractable in malignant forms. From variola, in West Yorkshire, we have for many years had a comparative exemption, an individual case now and then presenting itself of a sporadic character. But in my earliest years of practice it was a common endemic, perpetuated, I recollect, by the not uncommon practice at that time of variolous inoculation, in substitution for the present method of prevention. The attacks in severe cases were, in my experience, invariably ushered in by obstinate and persistent vomiting, and in all such instances in which I procured a sectio cadaveris, either absolute lesion or a highly congested condition of the stomach, with discoloured patches along the alimentary tube, led me to treat this early stage, with moderate and increased success, by the repeated application of leeches to the epigastrium, followed by emollient poultices and a bland farinaceous diet. The utter failure and aggravation by the purgative treatment, then in vogue, led me early to abandon that method; and for the distress and irritation of the skin I found nothing so refreshing and cooling to the surface as the linimentum calcis frequently applied by means of a good-sized, soft varnish-brush. Probably a little carbolic acid or glycerine to this liniment would not be an inert addition. What would have proved confluent cases, I think, became of the distinct form under this management, which I can confidently recommend.

I am, Sir, yours faithfully,

Halifax, May 30th, 1871. WM. ALEXANDER, M.D., F.R.C.P.,
Senior Physician, Halifax Infirmary.

GOVERNMENT CHEMISTRY.

To the Editor of THE LANCET.

SIR,—Dr. Angus Smith's latest report, just issued under the Alkali Act of 1863, contains no fewer than twelve tables of "albuminoid ammonia," and affords a very striking example of the uses which an accomplished chemist can find for the method which Chapman, Smith, and I (fortunately perhaps for chemists generally, but unfortunately for ourselves) put forward in the year 1867.

Notoriously the ammonia process is valid, and notoriously it is practicable. Still it was visited with the formal and official condemnation of Drs. Frankland and Odling, in their report to the Royal Commissioners on Water-supply in the year 1868; and, bearing this fact in mind, I desire to call public attention to the high moral courage displayed by Dr. Smith in venturing to use for public purposes a method which labours under such tremendous disabilities as the ammonia process.

I am, Sir, your obedient servant,

London, June 27th, 1871. J. ALFRED WANKLYN.

HYDRATE OF CHLORAL.

To the Editor of THE LANCET.

SIR,—As a belief in the perfect harmlessness of chloral seems to be still widespread, perhaps you will allow me to add my word of warning to those already given, and to call attention to some alarming symptoms I have seen produced by it. On four or five occasions, after giving twenty or thirty grains of chloral, I have found that the patient slept for about a quarter of an hour, and then awoke in a state of deadly faintness; the lips livid, the face pale, and the pulse almost imperceptible. There was a sense of intense exhaustion and impending death, mingled with an indescribable delirious feeling; this lasted for about five or ten minutes. Curiously enough, one patient, as he was rallying from this state said, "don't give me any more of that chloroform." He had taken chloroform a day or two before, and the sensations produced by the chloral so closely resembled his feelings on that occasion, that he thought I had given him chloroform again. Another of these patients, in addition to the other symptoms, saw figures dancing wildly round the foot of her bed. This patient had mitral disease, and was the only one of the four or five who had heart affection. As has already been indicated in THE LANCET by Drs. Fuller and Crichton Browne, chloral has a depressing action on the heart, and should therefore be avoided in all cases where the activity of that organ is impaired.

While it occasionally produces ill effects, chloral also frequently disappoints us, especially when it is given to relieve pain, or when the patient has been accustomed to opium—by acting very inefficiently, or by producing no effects at all.

For my own part I have found it most serviceable in cases of simple insomnia, and in the sleeplessness of phthisis and some nervous disorders.

I am, Sir, your obedient servant,

Jersey, June, 1871. ANDREW DUNLOP, M.D.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

THE annual meeting of the Birmingham and Midland Branch of the British Medical Association was held last week in this town, when Dr. Thomas Underhill, of Great Bridge, the retiring president, vacated the chair in favour of Mr. Oliver Pemberton. Mr. Bartleet, the secretary, read the report, which stated that the branch continued to make progress. The number of members was 252; 40 had been elected during the past year, and 35 had resigned, left the neighbourhood, or been excluded for non-payment of subscriptions, and 4 had been removed by death. The Pathological and Clinical section had continued its work, and greatly relieved the branch meetings, at which time often failed for the exhibition and discussion of pathological specimens and living cases. The Council suggested that, should its resources permit, some portion of the funds of the British Medical Association should be annually set aside for the encouragement of original research in medicine, surgery, and the allied sciences, and earnestly represented the claims of Dr. Norris. Professor of Physiology in Queen's College, to such a recognition of his labours. There was every probability that the invitation of the Branch to the British Medical Association to hold its annual meeting in Birmingham in 1872 would be accepted, and for that year Mr. Ebbage, of Leamington, was elected president. Mr. Pemberton gave an interesting address, in which he touched upon a great variety of professional topics, mentioning with satisfaction, as a Birmingham man, the liberal way in which the appointments at the various charities were thrown open to medical men coming from a distance and educated in other medical schools. He strongly disapproved of the present mode of settling claims for compensation after railway and other accidents, and suggested the appointment in all cases of a medical arbitrator, whose duty it would be to receive the medical evidence from the claimant's ordinary medical attendant, and from the company's medical adviser, and then to report on the character and extent of the injury, leaving it to the jury to determine the money value of the damages. Mr. Pemberton advocated the formation of convalescent hospitals in connexion with the present institutions, and also the establishment of a special asylum for incurables. He desired to restrict the admission to hospitals to a great degree, and to discourage the formation of separate institutions for various diseases. He made an unsparing attack on the homœopaths, which appears to have excited no little stir among them. Angry denunciations of Mr. Pemberton and the "old school" have been heard on all sides, and the usual charges of illiberality, jealousy, *et hoc genus omne*,

have been levelled at those who have the courage to call globulism a farce, and to refuse to recognise the practitioners of it as aught but charlatans. One of their advocates in the *Birmingham Daily Post*, who signs himself "A Grateful Patient," "is not surprised by the outcry of the old faculty. The havoc made in their family practice alone by the new rival I know to be considerable; and such as, should it proceed in the same ratio for the future, is likely rather to cause them to seek 'to hang on' to it, than it to them." When homœopathy adds any new facts to the science of medicine or pathology, then and then alone can it hope to rank as a legitimate object of study, or to receive that attention which its admirers think, no doubt honestly, that it deserves.

The Children's Hospital has considerably augmented its staff by the appointment of two extra acting physicians and an ophthalmic surgeon. To the former appointments Dr. Sawyer (late house-physician of the Queen's Hospital) and Dr. E. Mackey (professor of materia medica in Queen's College) were elected; and for the latter, Mr. Lloyd Owen (formerly house-surgeon of the Birmingham Eye Hospital) was chosen. It would have been difficult for the Election Committee, which is specially appointed for the purpose, to have obtained the services of three gentlemen more admirably qualified in every respect for the offices to which they have been severally elected. For the ophthalmic appointment there was a very spirited competition. Each of the three candidates had previously been house-surgeon at the Eye Hospital, and had studied ophthalmic surgery in London and Paris, and therefore had received such a training as would make him eligible for the office; but Mr. Owen secured the largest share of support, in consequence of his having made ophthalmic surgery a specialty, and devoted himself entirely to it for some years.

The new special Hospital for Women is going to appoint its staff of four acting officers next week. There are eight or nine candidates in the field, and a very active canvass is being prosecuted among the governors; though I am glad to see there is, on this occasion, less recourse to advertising in the various local papers. Several of the candidates, and among them not the least distinguished for surgical skill or special knowledge of this subject, have abstained from making any public advertisement of their claims. It is to be hoped that their reticence will not be unappreciated by the governors.

Mr. Pemberton's case of ligature of the external iliac artery is doing admirably. The ligature came away on the twenty-first day spontaneously, and unattended by the slightest hæmorrhage. The aneurism is consolidated, and is fast diminishing in size.

Mr. West has resigned the co-Professorship of Anatomy in Queen's College owing to the increasing demand of private practice upon his time. Dr. Thomas, the senior demonstrator of anatomy, and Mr. Solly, the junior surgeon of the General Hospital, are spoken of as candidates for the appointment.

Birmingham, June 26th, 1871.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

UNIVERSITY OF DUBLIN.

THE first examination in State Medicine, the new degree originated by this University, took place on the 12th inst., when four candidates, Messrs. Moore, Foot, Todhunter, and Yeo, presented themselves, and were all successful. The course of study was a comprehensive one, and included Vital Statistics; the chemistry of air, water, gaseous poisons, and the principal deodorising and disinfecting agents; Medical Jurisprudence; Law—the legislation relative to sanitary measures, the duties of medical men relative to vaccination, lunatic asylums, prisons, &c.; Engineering—in relation to the construction of hospitals, barracks, troopships, prisons, and the sewerage and waterworks of cities; Pathology—in reference to the laws of epidemics, of contagion and infection, influence of hereditary disposition, &c. A candidate for this new qualification must already hold a medical or surgical diploma.

The examination for the Medical Travelling Prize of £50 was held on June 21st and 22nd, when the prize was awarded to Mr. Jacob O'Connor.

CENSUS OF IRELAND.

The Report of the Census Commissioners for Ireland for the last ten years states that the total population amounts to 5,402,759; the sexes being 2,634,123 males, and 2,768,636 females, or 396,208 of both sexes less than that returned for 1861, being a decrease of 6·83 per cent. during the last ten years; 7·16 per cent. as regards males, and 6·52 respecting females. The localities in which an increase of the population has taken place are Belfast, 43·41 per cent.; Londonderry City, 20·92; Dublin county, including metropolitan suburbs, 2·87; Waterford, 19; and Carrickfergus, 32 per cent. To balance this decrease of 396,208, we have the returns obtained by the Registrar-General for Ireland, through the constabulary agents at Irish ports, which show that 846,956 Irish emigrants sailed from that country between the ten years ending March 31st last. It is here worthy of remark that at the time of taking the census in 1851 there were no less than 250,611 paupers in the Irish workhouses, and 47,029 persons in hospital, of whom 4545 were not workhouse inmates; that in 1861 the numbers in workhouses, healthy and sick, were 50,010, while there were but 48,989 persons in the workhouses in Ireland the day before the recent census was taken.

OVARIOTOMY.

Cases of ovariotomy in Dublin resulting successfully are so rare that it may be interesting to state that within the last few weeks two have taken place; one by Mr. Hayes, of the Mater Misericordiæ Hospital, and the second by Mr. Walsh, of the Adelaide Hospital. In the former, I believe, no adhesions existed, but they were found in the latter. This is the second successful case of ovariotomy performed by Mr. Walsh.

SMALL-POX.

In the Union Hospital at Belfast, in the week ending June 17th, there were 17 cases of this affection yet under treatment, 3 cases having been admitted from the previous week, but no deaths have taken place during that period.

In Waterford, the case of variola imported there last week has died. It was complicated with purpura hæmorrhagica; in fact, the purpura was one of the first symptoms.

Dublin, June 27th, 1871.

Obituary.

ANSELME PAYEN.

THIS eminent French chemist, whose death has been reported, was born in Paris on January 17th, 1795. His name will be familiar to our readers in connexion with the analysis of articles of food. He was elected a member of the Institute in the year 1842. In early life he had the management of a factory in which sugar was extracted from beetroot. Afterwards, having had the charge of another chemical works, he became Professor of Industrial Chemistry in the École des Arts et Métiers, in Paris.

Among his researches we may mention his work on the Conversion of Starch into Dextrine and Grape-sugar, and his investigation of Diastase. He investigated the physical and chemical properties of different vegetable tissues, also the chemistry of the nutrition of plants. He wrote on the distinctive characters of animal as contrasted with vegetable tissue, and experimented on the gastric juice. The potato disease, gun-cotton (which he studied so long ago as 1846, the year after its discovery by Schönbein), the composition of the eyes of Peruvian mummies, manures, and a variety of other subjects engaged his attention at different periods of his life. Quite recently, notwithstanding his advanced age, we hear of his having been on a commission to report on disinfectants, and of his activity in the matter of food-supply, which the events of the war had rendered so pressingly interesting to French *savants*.

OLLIVE SIMS SHAW, M.R.C.S., L.S.A.,

OF STOCKPORT.

ANOTHER early death has to be deplored in the person of this promising young surgeon, whose career has been

prematurely cut short by typhus fever. Originally articled to a general practitioner at Stockport, and a pupil of the Stockport Infirmary, Mr. Shaw finished his curriculum at Guy's Hospital, and after being assistant medical officer at the Gloucester Asylum, became house-surgeon to the West Derby Union Hospital, at Liverpool, where, overtaxed by physical labour consequent on the severity of the present epidemic, he fell a victim, after a few days' illness, to the disease he was called upon to treat in others. Of amiable manners, frank and intelligent demeanour, untiring assiduity in his work, and strictly conscientious in his relations towards others, Mr. Shaw carried with him to the grave the affection and sympathy of all surrounding him.

It is sad to record this early pruning of the youth of our profession; but the sap of them is left in the tree, to bud forth afterwards to the accomplishment of a perfect fruit from the germ of good example left behind.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on June 15th and 22nd:—

Deeping, George Davidson, Newark.
Dunstan, Robert, Liskeard, Cornwall.
Ellis, Edward Thos. Charles, Bexley-heath, Kent.
Fisher, Frederick Alfred, Upper Holloway.
Freston, Robert Smirke, Rotherhithe.
Fulford, William Edward, Swansea.
Heygate, Wm. Harris, West Haddon, Northamptonshire.
Piggott, Edward Alfred, Argyll-street, Regent-street.
Van Waterschoodt, Charles, High-street, Deptford.

As Assistants in Compounding and Dispensing Medicines:—

Dunn, Henry, Shipley, near Leeds.
Tomlin, Albert Roberts, Barnsley.
Williams, Jabez Vivian, St. Ives, Cornwall.

On June 15th the following gentleman passed his first professional examination:—

Woodhouse, Robert Hale, Middlesex Hospital.

COLLEGE OF PHYSICIANS, IRELAND. — At examinations held on June 14th and 15th the following gentlemen obtained the licences in Medicine and Midwifery:—

MEDICINE.—Edmund Fitz-Garrett Butler, Hugh Thomas Jones, Thomas Morgan, Frederick Alcock Nixon, John Byrne-Power, James Simms, Denis Walshe.

MIDWIFERY.—Hugh Thomas Jones, Thomas Morgan, Frederick Alcock Nixon, John Byrne-Power, Arthur H. Ringland, Denis Walshe.

QUEEN'S UNIVERSITY IN IRELAND. — At a meeting of the University held at Dublin Castle on June 20th the following degrees were conferred:—

DOCTOR IN MEDICINE. — Samuel Agnew, Hazlett Allison, Robert Blood, D. Graham Browne, William Richard Browne, William Burke Cuppage, James Dawson, Benjamin Derham, Thomas Derham, Thos. J. Donnelly, Bernard Doyle, Anderson Forsythe, Alexander MacLeod Hamilton, Alexander Harbinson, Richard Henry, J. King Kerr, John Knox, James Lawrence, Robert M'Bride, James M'Carthy, John M'Conaghey, George Henry M'Swinney, Joseph Mark, John Marrow, William Kirkpatrick Murphy, Sutherland Rees-Philips, Robert Riddell, William Rutherford, Richard Ryan, Ebenezer Sloane, Saml. John Smith, John Wilson Steele, John Woodrow Watson, Alexander M'Cook Weir, John Wilson, John Bower Wilson, Joseph Wilson, Alexander Young.

MASTER IN SURGERY. — Robert Blood, D. Graham Browne, William R. Browne, J. King Kerr, John Knox, James Lawrence, Robert M'Bride, James M'Carthy, John M'Conaghey, George Henry M'Swinney, William Kirkpatrick Murphy, W. O'Reilly, Surtherland Rees-Philips, Robert Riddell, William Rutherford, Richard Ryan, John Wilson Steele, John Woodrow Watson, Joseph Wilson, Alexander Young.

A. B. SHEPPARD, M.B., is a candidate for the vacant appointment of assistant-physician at St. Mary's Hospital.

THE NEW HOTEL DIEU OF PARIS.—It has been proposed to transform this unfinished building into a town-hall, as the latter venerable building has been reduced to ashes. As the sanitary arrangements of the new Hôtel Dieu are very defective, such a change would be very desirable.

YELLOW FEVER.—This epidemic still continues at Bahia. The barque *Alvington* arrived at Portsmouth some few days ago, having lost five seamen from the disease during the homeward passage; the barque *Lady Agnes* had six cases on board, and two deaths; and a fatal case occurred on the *Harebell*, also bound for England from Bahia.

RIO DE JANEIRO, according to an Admiralty notice, is in a highly satisfactory state of health.

REVIEW DAY AT ST. BARTHOLOMEW'S HOSPITAL.—The annual meeting of the Governors of St. Bartholomew's Hospital, which, in accordance with old established custom, is followed by the review of the hospital, and the distribution of rewards to sisters and nurses, will be held on Tuesday next, under the presidency of the Prince of Wales. It is believed that the Princess of Wales and the Grand Duke Vladimir of Russia have signified their intention of being likewise present. The governors will avail themselves of this opportunity to formally accept Mr. Paget's resignation, and express the regret with which they view the loss of that gentleman's brilliant services.

THE FACULTY OF MEDICINE OF MONTPELLIER.—An important paper has been sent to the Minister of Public Instruction by the Dean of this Faculty. It is therein urged that the military medical school formerly existing at Strasburg ought to be transferred to Montpellier, the advice being supported by good arguments. The Dean also advises various changes and improvements in the Faculty over which he presides, especially as regards the establishment of laboratories, both chemical and physiological, and more liberal allowances for the study of pathological anatomy, &c.

SURGEONS OF THE COMMUNIST ARMY.—Several federal surgeons have been arrested; of them, says the *Gazette Médicale*, some have been discharged from custody, but others have been sent to gaol. The editor adds that about those few who professed communistic opinions, and acted in consequence, he has nothing to say; but, he observes, the greater number were pressed into the service, or accepted the appointment of battalion surgeons from sheer want of funds. Among the latter are many young practitioners and medical students. Some of the surgeons who have been captured had only in view the care of the wounded, and humanely undertook a very onerous task. The editor concludes that such men should not be looked upon as insurrectionists, and contends that they should be at once released.

PARLIAMENTARY COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.—At a meeting of this committee it was resolved:—1. That the purchase of immunity from the operation of the Act provided by Clause 10 of the Vaccination Amendment Bill, is vicious in principle, and that such clause should be expunged. 2. That, considering the expected action next year of the Government in reference to the recommendations of the Royal Sanitary Commission, and the anticipated adoption of a comprehensive plan of sanitary organisation for the whole kingdom, it is inexpedient to create a new class of health officers with permanent claims, and that the appointment of vaccination officers should, therefore, be limited to one year from the commencement of the Act. 3. That it is desirable that provision should be made for the due carrying out of the regulations for keeping, dispensing, and selling of poisons, and that for this purpose a clause should be introduced providing inspectors to ascertain that they are carried out.—The Registration Amendment Bill was considered and approved, but it was stated that it would be opposed this year on the ground that it was piecemeal legislation, and that a larger measure including it was under consideration, and expected to pass next year. The secretaries were directed to forward copies of the above resolutions to the Lord President of the Privy Council.

BEQUESTS, DONATIONS, &c.—Mr. John Freeland, a native of Glasgow, now living at Nice, has given £3000 to the new building of the Glasgow University, £5000 to the Royal Infirmary, Glasgow, and £5000 to Anderson's University. Mr. John Bockett bequeathed £500 to the British Home for Incurables. The South Staffordshire Hospital, Wolverhampton, has received £500 from the representatives of the late Mr. John Baldwin; and £100 from Mr. John Mason, in memory of Sarah Mason. Messrs. N. M. Rothschild and Sons have given £200 to St. George's Hospital. The Salop Infirmary has received £179 6s. 8d. under the will of Mrs. Lucy Darby. Miss Emma Smart bequeathed £100 to the Queen's Hospital, Birmingham. The Norfolk and Norwich Hospital has received £100 from the executors of Mr. John Marshall. Mr. Henry Brennan has given £100 to the Adelaide Hospital, Dublin.

Medical Appointments.

ALLWOOD, J. P., L.R.C.P.L., M.R.C.S.E., has been appointed House-Surgeon to the Macclesfield Dispensary.

ANDERSON, T. M'C., M.D., F.F.P. & S. Glas., has been appointed Consulting Physician to the Glasgow Institution for the Deaf and Dumb, vice A. D. Anderson, M.D., F.R.C.S.E., F.F.P. & S. Glas., deceased.

AVELING, C. T., M.B., F.R.C.S.E., has been appointed (temporarily) Medical Officer to the City of London Union Infirmary at Homerton, vice Benj. Clarke, F.R.C.S.E., resigned.

BRICKWELL, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Stoke District of the Eton Union, vice C. Holmes, F.R.C.S.E., whose appointment has expired.

CAMPBELL, A. C., M.B., L.R.C.S.Ed., has been appointed Surgeon to the Royal Infirmary, Dundee, vice J. R. Begg, L.R.C.S.Ed., whose term of office has expired.

CARTER, B., M.B., M.R.C.S., has been appointed Surgeon to the Eastern Dispensary, Bath.

CROSSLE, F. C., M.B., has been appointed Medical Officer to the Whitwell District of the Worksop Union, vice A. J. F. Russell, L.K.Q.C.P.I., resigned.

DRINKWATER, W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Bicester District and the Workhouse of the Bicester Union, vice S. Murchison, M.R.C.S.E., deceased.

DRYSDALE, C. R., M.D., M.R.C.P.L., has been elected a Physician to the Metropolitan Free Hospital, vice James Jones, M.D., M.R.C.P.L., deceased.

DUDLEY, J. G., M.D., M.R.C.P.L., has been elected a Physician to the Metropolitan Free Hospital, vice Wm. Lomas, M.D., M.R.C.P.L., resigned.

EDDISON, J. E., M.D., M.R.C.S.E., has been elected Physician to the General Infirmary, Leeds, vice C. Chadwick, M.D., F.R.C.P.L., resigned.

GOOD, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Charminster District of the Dorchester Union, vice Geo. Curme, M.R.C.S.E., resigned.

GRAY, T. K., M.B., L.R.C.S.Ed., has been appointed House-Surgeon to the Cumberland Infirmary, Carlisle, vice J. Troutbeck, M.B., L.R.C.S.Ed., resigned.

HART, E. J., M.R.C.S.E., has been appointed Medical Officer for the 2nd Division of District No. 3 of the Newhaven Union.

HEMINGWAY, E. V., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Heywood District of the Bicester Union, vice J. T. Morris, M.D., M.R.C.S.E., deceased.

HEWITT, Mr. W., has been appointed an Assistant Medical Officer at the Cape Copper Mines, Cape of Good Hope.

HOSEGOOD, S., M.R.C.S., has been appointed House-Surgeon to the Chorlton-upon-Medlock Dispensary, Manchester, vice J. Porter, M.R.C.S., resigned.

KIDGELL, G., M.R.C.S.E., has been appointed Medical Officer for District No. 1 and the Workhouse of the Wellington Union, Somersetshire, vice W. Reynolds, M.R.C.S.E., resigned.

MACKEY, Dr. E., has been appointed Extra Acting Physician to the Children's Hospital, Birmingham.

MERCER, N. G., M.D., has been appointed Medical Superintendent of the East Riding of Yorkshire Lunatic Asylum, Beverley.

MOLYNEAUX, J., M.D., has been elected Medical Officer for the Hessle District of the Sulcoates Union, Yorkshire, vice W. Birtwhistle, M.R.C.S.E., resigned.

O'NEILL, W., M.D., L.R.C.S.E., has been appointed Medical Officer for the Workhouse of the Mitchelstown Union, Co. Cork, vice James Phelan, M.R.C.S.E., deceased.

OWEN, Mr. D. C. LL., has been appointed Ophthalmic Surgeon to the Children's Hospital, Birmingham.

PRICE, Mr. C. W., has been appointed House-Surgeon at University College Hospital.

RICHARDS, D., M.R.C.S.E., has been reappointed Medical Officer to the Brighton Workhouse and Infirmary.

ROBERTS, Dr. F. T., has been appointed an Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Wm. Marcet, M.D., F.R.C.P.L., resigned.

SANDELL, H. W. A., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Hornby or No. 1 District and the Workhouse of the Lunesdale Union, Lancashire, vice J. B. Nottage, M.R.C.S.E., on expiration of appointment.

SAWYER, Dr. J., has been appointed Extra Acting Physician to the Children's Hospital, Birmingham.

SHAW, T. C., B.A., M.D., M.R.C.P.L., Medical Superintendent of the Metropolitan Asylum, Leavesden, has been appointed Lecturer on Mental Diseases at St. Bartholomew's Hospital, vice R. Thorne Thorne, M.B., M.R.C.P.L., resigned.

SMYTH, E., M.B., has been appointed Joint Resident Medical Officer to the Royal Infirmary, Dundee, vice G. D. Bruce, M.B., deceased.

STEDMAN, Mr. A. N., has been appointed an Assistant Medical Officer at the Cape Copper Mines, Cape of Good Hope.

SYMES, Mr. E. W., has been promoted from Assistant Resident Medical Officer to Senior Resident Medical Officer of the Leeds Public Dispensary, vice J. M. Fothergill, M.D., resigned.

WADDY, J. P., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Crossabeg Dispensary District of the Wexford Union, vice E. Goodall, F.R.C.S.I., deceased.

WALDO, H., M.B., M.C., M.R.C.S.E., has been elected Resident Medical Officer to the Royal General Dispensary, Bartholomew-close, vice Dr. Hill, resigned.

WEBSTER, H. W., L.R.C.P., M.R.C.S., has been appointed Assistant Resident Medical Officer to the Chorlton Union Hospital, vice R. W. Goldie, L.R.C.P.

WHEATCROFT, S. H., L.R.C.P., M.R.C.S.E., has been appointed Junior House-Surgeon to the Sunderland General Infirmary, vice F. R. Heycock, M.B., M.R.C.S.E., resigned.

WHITE, J. C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer at the Royal Kent Dispensary, Greenwich, vice G. G. Bothwell, L.R.C.P.Ed., M.R.C.S.E., appointed Medical Officer to the Woolwich Union Workhouse.

WILLIAMS, D. T., M.R.C.S.E., has been reappointed Medical Officer for the Western District and the Workhouse of the Gower Union for three months.

Births, Marriages, and Deaths.

BIRTHS.

FERNIE.—On the 22nd ult., at Shalton St. Margaret, Wilts, the wife of James Fernie, Surgeon, of a daughter.

JOY.—On the 6th of April, at Valparaiso, Chili, the wife of J. H. Joy, M.D., of a son.

MILES.—On the 26th ult., at Plympton St. Maurice, Devon, the wife of Geo. Miles, Surgeon, of a son.

PRICHARD.—On the 22nd ult., at Wonastow Court, near Monmouth, the wife of Dr. W. G. Prichard, of a daughter.

TUKE.—On the 22nd ult., at The Manor House, Chiswick, the wife of Harrington Tuke, M.D., of a daughter.

VANCE.—On the 21st ult., at Rathdrum, Co. Wicklow, the wife of J. Vance, L.K.Q.C.P.I., of a son.

MARRIAGES.

TAIT—STEWART.—On the 28th ult., at All Saints', Wakefield, Lawson Tait, F.R.C.S.E., F.R.C.S.Ed., of Waterloo-street, Birmingham, to Sybil Anne, eldest surviving daughter of William Stewart, Esq., of York House, Wakefield.

WALKER—HETHERINGTON.—On the 22nd ult., at Christ Church, Bootle, George Charles Walker, M.D., to Louisa Ann, daughter of Walter F. S. Hetherington, Esq.

WILSON—POWYS.—On the 22nd ult., at St. Paul's, Dorking, James Arthur Wilson, M.D., to Eleanor Powys, daughter of the late Hon. and Rev. Littleton Powys.

DEATHS.

ASBURY.—On the 21st ult., Jacob Vale Asbury, M.R.C.S.E., of Enfield, aged 79.

BEALE.—On the 23rd ult., Lionel John Beale, M.R.C.S.E., of Long-acre, aged 74.

CRAWFORD.—On the 16th of May, at Dhurmsala, Punjab, John Duncan Crawford, M.B., Surgeon-Major 2nd Bengal Cavalry.

DUNDAS.—On the 25th ult., Robt. Dundas, M.D., of Gloucester-place, Hyde-park, formerly Assistant-Surgeon 60th Regiment, for many years Physician to the British Hospital at Bahia, and afterwards Physician to the Northern Hospital, Liverpool.

EDMONDS.—On the 15th ult., Henry Edmonds, M.D., Staff Surgeon H.M.'s Ship "Dædalus."

HAWETT.—On the 21st ult., Wm. Hawett, M.R.C.S.E., of Wigan, second son of Thos. Hawett, M.R.C.S.E., aged 31.

KYNSEY.—On the 23rd ult., Josiah F. Kynsey, L.K.Q.C.P.I., R.N., son of T. B. Kynsey, M.D., of Athy, Co. Kildare.

LAMBE.—On the 20th ult., at Torquay, Lacon Wm. Lambe, M.D., of Henwood, Dilwyn, Herefordshire, aged 73.

Medical Diary of the Week.

Monday, July 3.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.

Tuesday, July 4.

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Wednesday, July 5.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M. Lateral Lithotomy (expected) by Sir H. Thompson.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
OBSTETRICAL SOCIETY OF LONDON.—7½ P.M. Council Meeting.—8 P.M. Dr. Tilt, "On the Diagnosis of the least known varieties of Uterine Inflammation."—Dr. Copeman: "Notes of Cases of interest."—And other papers.

Thursday, July 6.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.

Friday, July 7.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, July 8.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, Moorfields.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 1 to 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

VACCINATION OR SMALL-POX.

A Lawyer.—We have great pleasure in answering such reasonable questions as are put by our correspondent. He would do well, as an intelligent layman, to study the evidence on this subject to be seen in such books as Dr. Seaton's Handbook on Vaccination or Dr. Ballard's Prize Essay, and in the answers returned by nearly 600 of the leading medical men of this country to Mr. Simon a few years ago. He will, we think, be satisfied from this evidence that scrofula is not conveyed by vaccination, but that the development of it in constitutions is greatly prevented, inasmuch as small-pox, by weakening the system, was often the occasion of the development of scrofulous and tubercular disease in it. Occasionally vaccination disturbs the system of delicate children, and leads to slight eruptions. But the connexion of the two is often accidental; and when skin eruptions are actually occasioned by vaccination, the fault is not necessarily in the matter with which the child was vaccinated, but often in the constitution of the vaccinated, which cannot bear even the slight disturbance of vaccination with perfect impunity, and, *à fortiori*, cannot bear the destructive disturbance of small-pox, which is the almost certain alternative. As to the transmission of syphilis, the possibility of such an accident, *with care in vaccinating and in selecting lymph*, is denied by many, though we do not go so far. Our correspondent will be surprised at the labour that has been given to the elucidation of this question, and at the rarity even of the alleged transmission of syphilis. We cannot pretend in a few lines to state the evidence. But we again urge our correspondent to make a personal study of the question, and we shall be surprised if he does not vindicate the common sense of laymen and of lawyers by entering the lists against anti-vaccination fanaticism. Let him remember that small-pox is a very certain evil to be encountered by the unvaccinated, and that the risk attending vaccination is infinitesimal.

Mr. R. S. Chrystal.—There are no materials for a strict comparison, for the registration of causes of death only dates from 1837. But the undoubted lengthening of average life in the community is quite inconsistent with Dr. Collins's statements, or with the notion of the greater prevalence of scrofulous diseases. That scrofulous disease was not unknown before the introduction of inoculation or vaccination may be gathered from the fact that Charles the Second, according to Macaulay, touched near a hundred thousand persons in his reign, and that James in one of his progresses touched eight hundred persons in the choir of the Cathedral of Chester. Of course the diagnosis here was not very trustworthy; but it was probably more so than Dr. Collins's statistics. Death from consumption is slightly declining, and death from scrofulous states is, doubtless, much rarer than formerly.

Dr. Thos. Jackson.—We think our correspondent will not require to do more than take up his abode among old patients. There is no breach of etiquette in using the title mentioned. The satisfaction with which it is used will depend much on our correspondent's own opinion of its merits.

Mr. P. C. Haywood will find the information he requires in THE LANCET of May 27th last. We do not give private answers.

CANADIAN MEDICAL REGULATIONS.

To the Editor of THE LANCET.

SIR,—I noticed in your impression of May 20th an answer to "M.D.," in which you inform him that an English diploma suffices for practice in Canada. You are under a misapprehension in this matter, as by the Medical Act of Ontario of 1869 only those possessed of English or Canadian diplomas within six months from the passing of the Act were entitled to practise and recover fees on payment of a registration fee of ten dollars, or if possessed of a qualification before July 1st, 1865, on payment of a fee of five dollars (22nd section of Act). Those who were not so qualified come under the 23rd section, which provides that every person desirous of being registered under this Act, and who shall not have become possessed of any English or Canadian qualification before the expiration of six months after the passing of this Act (January 23rd, 1869) shall, before being entitled to registration, present himself for examination as to his skill and knowledge for the efficient practice of his profession before a Board of Examiners to be appointed by the Medical Council; and upon passing the examination required, and proving to the satisfaction of the Board of Examiners that he has complied with the rules and regulations made by the Council, and on payment of such fees as the Council may determine, such person shall be entitled to be registered, and in virtue of such registration to practise medicine, surgery, and midwifery in the Province of Ontario.

I have in the preceding lines given an abstract of that portion of the Act that relates to your answer. A somewhat similar Act exists in the Province of Quebec.

As to the eligibility of Canada as a field for the young practitioner, I have only to say that the majority of Canadian graduates go over to the United States to practise, and that Canada is unfortunately too well stocked with M.D.s already. The Province of Ontario contains upwards of 1500 medical men registered, with a population of about a million and a half, or an average of a registered practitioner to every thousand inhabitants. There are probably, besides, from 300 to 500 unregistered men.

If you think fit to insert this, it may be interesting to those who, like "M.D.," contemplate emigration to find a wider field for practice than they ever obtain in England.

Yours truly,

H. J. SAUNDERS, M.D., M.R.C.S. Eng.

Kingston, Ontario, June 9th, 1871.

THE LEPROSY INQUIRY.

WE hear that Dr. Gavin Milroy, as the representative of the Royal College of Physicians, starts on Saturday next for Demerara to conduct further inquiry into the treatment of leprosy by the method recently advocated by Dr. Beaupurthuy. Dr. Milroy will subsequently proceed to Trinidad and other West Indian islands, with the same object in view, and we hope that much good will result to the leper community from this mission, which is as humane as it is scientifically important. The selection of Dr. Milroy by the College of Physicians is one which meets with the warm approval of the profession, and that gentleman will bring to bear upon the question, not only a very special knowledge of leprosy itself, but the necessary caution, and a judgment matured by great experience in kindred investigations. The "correspondence" recently presented to Parliament relative to Dr. Bakewell's observations makes us acquainted with the views of the College of Physicians upon the probable value of Dr. Beaupurthuy's treatment. The College aver that the facts adduced at present "do not contain any positive evidence of a cure of leprosy having been effected." They only make out a case for the inquiry which Dr. Milroy undertakes at their suggestion. This exactly coincides with our recent comments, which anticipated by a few days the issue of the public document we are referring to. Those who are anxious to learn the exact details of Dr. Beaupurthuy's treatment will find them in the document in question, which can be obtained for a few pence.

Student.—The degree is not one on the strength of which its possessor could recover for medical services in a court of law; but we could not recommend legal proceedings with penal purposes in the present state of the law.

HOSPITAL ELECTIONS.

To the Editor of THE LANCET.

SIR,—The letter signed "Henry Taylor," which appeared in your journal of last Saturday, is a very notable instance of what that gentleman terms "the viciousness" which characterises the system of hospital elections. It is only by considering it as part of the "vicious system" on which the election here was conducted that I can account for the absence of professional, not to say of gentlemanly, courtesy which it evinces.

My letter to you or that in the local paper, on which you were pleased to base your first editorial remarks on the election, in no way justifies the assumptions of Mr. Henry Taylor. I studiously refrained from personal matters, and even now have no intention of following Mr. Henry Taylor's bad example, nor to undertake to prove that a fully qualified medical man, forty years of age, and who has practised for the last sixteen years, has not had a "modern education." Mr. Henry Taylor, perhaps, means that he was guilty of an indiscretion, as a member of the medical staff at the County Hospital, in taking an active part in opposing my election, because he did not wish to see me subordinate to a junior; but why that feeling should have weighed in the election, when he alleges also that the "younger candidate" possessed a "more modern education" than myself, appears a contradiction which I may leave to Mr. Henry Taylor to reconcile; while at the same time, as even my "senior," he ought at once, on his own showing, to abdicate the honorary medical officership in favour of the gentleman with the great advantage of a "more modern education." I am not going to accuse Mr. Henry Taylor, in words borrowed from your article of the 17th June, of being "blind to the professional merits of a rival practitioner," or to adopt your yet more severe hypothesis, of having aided "in the appointment of a candidate whose competition for practice was the least likely to be formidable"; but I do assert that the strongly marked and prominent part Mr. Henry Taylor took in the County Hospital election would in itself prove the necessity for some reform, while the partisan feelings that evidently animated him are faithfully portrayed in his letter of last week. I think, however, it would be improper to allow Mr. Henry Taylor's observations, uncalled for as they are, to divert attention from the important question at issue; and I therefore take advantage of the opportunity of gladly noting that, contemporaneous with your own expression of opinion, the British Medical Association might "profitably devote time to the discussion" of the matter of hospital elections, the official organ of that body endorsed your views, and expressed its convictions as being in favour of a committee of selection. My idea that the medical element should be taken from the consulting staff may not be the best; but I may remind you that your own impression, as stated in your article of the 3rd June, was in favour of a "mixed lay and medical committee," without any special reference to the acting staff. How far in the case of the County Hospital your idea as to "very good practitioners not being always satisfactory colleagues" would have been likely to be true, I leave yourself and your readers to judge from the letter of Mr. Henry Taylor which last week appeared in your columns. On side of all personal matters, there is evidently a strong opinion abroad that medical men should not be put to the trouble and expense of seeking miscellaneous support, but should rather have the opportunity of placing their claims before a competent and select tribunal. That this would tend to obtain medical aid of a less accomplished kind for hospitals than that procured by the present system I deny, and it cannot for a moment be asserted; that it would increase public confidence in the medical staff of such institutions is not to be doubted; and that it would prevent waste of time, labour, and money on the part of a class of men who have nothing of all three to throw away, is self-evident.

I am, Sir, your obedient servant,

Guildford, June 26th, 1871. HENRY F. HOLLAND, M.D.

Mr. James Ferrier Clarke.—We can give no opinion on the original question till all the facts and the explanation of Dr. Fletcher are before us. Unquestionably it is premature to call any medical man's conduct unprofessional until his explanation has been asked for in friendly terms. Mr. Clarke would do well to withdraw his first letter, which really complicates what is probably very simple.

A Butcher should consult his own medical adviser, and not persons who practise on the strength of diplomas which are worthless, and of no standing in law. The claim is illegal, except for the value of the medicines supplied.

DR. PANTALEONE.

THE Director of the great Hospital of the Santo Spirito in Rome has been successful in vindicating his character against the imputations of the *Tablet*. That journal stated that Dr. Pantaleone had emptied that hospital of all the religieuses the moment he became Director, and that he had been banished from Rome in 1862 for complicity in the Fausti conspiracy, which had for its object the assassination of the King and Queen of Naples, the officers of the Zouaves, and the Prince Torlonia, with the destruction of the Aliberta and other Pontifical theatres. Dr. Pantaleone was also charged with reinstating in the hospital two surgeons who had been convicted of teaching the young conspirators how to inflict mortal blows with rapidity and certainty, and of having attempted the lives of Neapolitan and Pontifical soldiers when under treatment in the wards. Dr. Pantaleone proved, against the charge of complicity in the conspiracy, that in 1862 he was exiled from Rome. But the *Tablet* repeated the offensive statements, so that the doctor had to bring an action against its proprietor. That gentleman (Dr. Vaughan) having instructed his counsel to make the amplest retractation of all the charges that had appeared in his journal against Dr. Pantaleone, and to express his high respect for the plaintiff, a verdict was then taken for the latter by consent—damages £250 to cover costs. The result will be received with much satisfaction in Rome, where Dr. Pantaleone is greatly esteemed.

Mr. R. A. Steel, (Kentish-town.)—We cannot advise our correspondent in the matter. Let him take the opinion of his ordinary medical attendant as to whom he had best consult under the circumstances.

ARMY MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—In your journal of June 3rd, referring to the Army Medical Department, you state: "If something be not devised to accelerate the rate of promotion, the authorities can scarcely expect to rule over a contented body of officers, or obtain fresh supplies"; and you go on to say the term of service in the inspectorial ranks should be limited, the retirement earlier, and provision be made for medical officers in a Medical Reserve. In these opinions you have with you every executive medical officer of the army. Unfortunately for us, the authorities, instead of facing these facts as they should, propound a scheme intended to deprive us of our regimental appointments, and by merely changing a name try to get out of the difficulty. It is manifest to anyone who knows anything of the service that the first proposition is most unpopular, and that the second, as not including an increase of pay and retirement, is equally so. What we want is a fair field and no favour: limitation of staff appointments to five years' tenure of office, as in every other branch of the service; promotion after a reasonable time; and retirement after twenty years upon more than 12*s.* 6*d.* per diem. Until these reforms take place, the department will remain in a chronic state of discontent.

A great number of schemes have been put forward from time to time to remedy those evils, and give the executive, or really working branch, something definite to look forward to. Of all these, the most popular appears to be one proposing a *time* promotion, as in the Indian service. Is this possible? I say yes, and without in any way disorganising our good old regimental customs. To promote every officer now having twelve years' service, you would require to provide for 200 promotions next year, involving an annual increase of £9000; add £5000 more, and 30 surgeons may retire annually on £1 a day—i. e., 8*s.* a day more than they are now entitled to. How is this sum to be obtained without increasing the present estimates? By reorganising the administrative ranks. There are 34 deputy inspectors, whose aggregate pay amounts to £20,000 per annum. Have only one administrative grade, that of inspector-general; absorb that of deputy-inspector, promoting eight to be inspectors, increasing the higher rank by that number, and place the remainder on half-pay. This would be no hardship, as probably many would like to go. In this way the £15,000 per annum may be obtained, and an incalculable benefit bestowed upon 900 executive officers. It may be then asked, how is the superintendence of the vacant districts to be provided for? Employ for this purpose the senior surgeons-major, who will be only too glad to get a staff appointment tenable for five years, and encourage more than is done at present individual responsibility upon the part of the medical officers, by allowing them to report direct to the head of their department. I would also call all cadets "surgeons," and on promotion "surgeons-major." You would then have the future surgeons-major and surgeons holding regimental appointments, and the senior surgeons-major ranking as lieutenant-colonels, employed principally on staff duties, such as recruiting, superintending districts, &c. &c. Time may be given for the development of this plan by employing the £10,000 required next year as pay for the 60 in-coming candidates, in at once promoting every officer of twelve years' service, and not estimating for the former gentlemen until the entire scheme was fully developed.

I sincerely believe such a plan is perfectly feasible, and, as carrying with it tangible advantages of pay, promotion, and retirement, would be immensely popular amongst the 900 officers who do the work of the department in its most disagreeable form. I am, Sir, yours truly,

June, 1871. REFORM.

Aylous.—1. Private vaccinations should not be charged for by public vaccinators.—2. Certainly not.—3. It is not legitimate; the very essence of stational vaccination being that it be done on a stated day weekly, and in a definite place. The only exceptions are in regard to cases of emergency. The guardians may, with the consent of the Privy Council, constitute the vaccinator's surgery or residence a station, and require the vaccinator to attend daily to vaccinate only cases of urgency. But indiscriminate house-to-house vaccination is entirely contrary to the letter and spirit of the instructions of the Privy Council.

Mr. N. C. Bamardiston (Sudbury) could not do better than apply to Dr. Tate, the Coppice, Nottingham.

SPECTROSCOPY IN THE LAW COURTS.

MR. STODDART, who writes to the *Pharmaceutical Journal*—which had done us the honour of quoting our article on Blood-stains *in extenso*, and of hinting approval of the course followed in that matter—asks us to point out some substance giving a spectrum coincident with that of blood. We cannot gratify him by doing so; but, as we said before, the whole subject of the spectra of coloured liquids is not yet sufficiently well explored to admit of the employment of spectroscopy for the decision of a capital charge. We cannot agree with Mr. Stoddart in thinking that the mistake which two of our best spectroscopists made relative to the spectrum of the mythical Jargonium is unconnected with the question of the degree of confidence to be reposed in the indications of spectroscopy. Before we accept a given absorption-spectrum as absolute evidence of the presence of blood, we should know that it is safe to trust to absorption spectra; and in Jargonium we have had a practical example of the results of trusting to them.

A Medical Student.—The degree in question cannot be registered, and does not entitle the possessor to practise in England. The gentleman named is, of course, fully qualified by his English diplomas. The Erlangen University, we believe, requires the presence of candidates for its degree. We should not doubt the possession of it in the case in question.

Mr. Oliver Pemberton.—We shall imitate our correspondent, and take no notice of the communication which he kindly forwards us.

"BONE-SETTING, ITS NATURE AND RESULTS."

To the Editor of THE LANCET.

SIR,—I am sure many of your subscribers will have read with great interest Dr. Wharton Hood's communication on "Bone-setting," &c., which appeared in your issue of the 11th March.

A case in point occurred to myself many years ago, when I first entered practice, and when, to use a sporting phrase, "my eye was wiped" by a bone-setter. I was then a surgeon of a steamer, and during a gale of wind a sailor received a severe fall, and completely lost the use of his right shoulder-joint. I put the man under the influence of chloroform, and carefully examined him, but could detect no signs of dislocation or fracture. I considered the case to be that of a violent sprain, and treated it in the usual manner. The man suffered a good deal of pain, and during the remaining three months of the voyage could not use his limb, and remained on the sick report. On arrival of the ship at Liverpool, I lost sight of him; but on rejoining in the course of a month, I met my friend, who sulkily told me that he intended prosecuting me for not treating him properly; that he had been to a bone-setter at Liverpool, who had "put in" his shoulder (this was the expression he used), and that he had heard the joint give a "snap." He could now use his arm perfectly, without any pain whatever.

I may add that the man did not attempt to prosecute me; but the case made a strong impression on my mind. I am sure that many of my professional brethren have met with similar cases, and I look forward to further discussion on Dr. Hood's promised continuation of the subject with much interest. Yours obediently,

JOHN G. REED, M.D.,
Surgeon, H.M. Indian Army.

Hingolie, Deccan, India, April 12th, 1871.

A Constant Reader may find it very difficult to make the landlord in his country district repair the house unfit for human occupation, particularly if he is a guardian of the poor. It is obvious that the best way of shutting up the house would be to forbid relief from the rates; but that course the guardian, who takes the relief in the shape of rent, is not likely to follow, because no independent labourer would live in such a hole. The proper course to adopt is to address a letter to the Board of Guardians.

Dr. Edward Haughton is thanked for his communication. We think it a great pity that sanitary measures and vaccination should be spoken of as if they were antagonistic or rival measures, and as if both were not urgently needed for the curtailment of this horrible epidemic. We are glad to hear that "the *Homœopathic Review* favours the vaccination and revaccination of every child born in the land." This is one of the several indications that homœopaths are returning to the paths of sense and science.

X. L.—1. It was illegal to bury without a coroner's inquest.—2. It requires the independent certificate of two medical men to send a patient to a lunatic asylum; but in the case of a pauper, only one medical certificate is necessary.

A DILEMMA.

To the Editor of THE LANCET.

SIR,—I am a gentleman by birth and education. For a certain love to science I chose the medical profession. My experience of it was chiefly rural, where the patient and the doctor are brought legitimately together. My fate led me to purchase a practice in London, and, to my surprise, I find myself surrounded with all the appliances of trade—coloured bottles, scents, tooth-brushes, small-tooth combs, treacle, &c. The very practice I entered upon was not without some of these adjuncts. I quickly expelled the coloured globes, and cut down the retail to a minimum. But what am I to do in competition on all hands with more showy establishments? Am I rightly informed that the medical men who are engaged in hospitals, dispensaries, &c., without any salaries, to attend the poorest in the land, are themselves obliged to live as respectable professional men, and eschew trade altogether? If so, does it not appear much more reasonable that we who have to attend the middle and upper classes for considerable payment should ourselves be compelled by some law of the colleges and schools to live as gentlemen, and, while we practise a liberal profession, to leave trade to those to whom it properly belongs?

Any suggestions will be thankfully received by,

Your bewildered servant,

June, 1871. DILEMMA.

P.S.—Some of my neighbours label their windows that they make up medicines ordered by other medical men. Is this professional?

A NEW POISON.

AT an interview held on Wednesday between the Sanitary Committee of the City Commissioners of Sewers and the Board of Trade, Mr. Daw, the chief clerk, read a communication, which stated that on the 21st a ship arrived in the docks from Shanghai with 5000 chests of poisonous tea. The interview, it may be premised, arose out of the failure of the Commission to check such importations, and its consequent conviction that the Government must take the suppression of the disgraceful traffic into their own hands. With all the restrictions on the sale of poisons by druggists, is there to be none on the sale of poisons by grocers? It has now become a question whether the wares of the tea-dealer are not more destructive of the lives of the liege than those of the publican—whether (to adopt Mr. Hannay's joke), the *canister* of the one is not more deadly than the *grape* of the other.

Mr. G. Yeates Hunter, (Sholapoor, Bombay.)—The title of Dr. Maudsley's book is "Body and Mind; an Inquiry into their Connexion and Mutual Influence, specially in reference to Mental Disorders: being the Gulstonian Lectures for 1870," and it is advertised under that title, and with the author's name. We think that there can be no danger whatever of its being confounded with Mr. Hunter's book to the prejudice of the latter, and we think that no question of copyright in the words "Body and Mind" can, under the circumstances, arise.

NITRATE OF SILVER IN PAINFUL SWELLINGS OF THE JOINTS.

To the Editor of THE LANCET.

SIR,—I notice in your issue of March 25th a communication from a correspondent, in which the application of nitrate of silver to "painful swellings of the joints in cases of rheumatic gout" is favourably spoken of. If your correspondent will refer to the *Med. Zeitung*, No. 26, 1842, he will there see that Dr. Moritz, of Coblentz, successfully employed the nitrate of silver, either in solution (ten grains to the fluid ounce) or in substance, as a local application in cases of articular effusions, whether resulting from gout, rheumatism, scrofula, or wounds. I have for more than twenty years past been in the habit of applying a solution of this salt (three to eight grains to the fluid ounce) to almost all painful swellings of the joints, whether resulting from blood disease or mechanical injury, and have as yet met with no one instance in which it failed to subdue inflammation and allay pain, whilst the swelling has rapidly subsided, leaving the joint perfectly flaccid. In cases of partial or complete dislocation of the ankle-joint, attended with more or less pain and swelling, I have long been in the habit of ordering the part to be frequently brushed with a solution of nitrate of silver (60 to 160 grains to the pint), both before and after reduction, with the view of subduing the pain, swelling, and inflammation, and it has never failed in any one instance to meet the required end within a very few hours.

Your obedient servant,
Sackville, N.B., May 16th, 1871. C. FITZHENRY CAMPBELL, M.B.

T. O. W.—Mr. Lockhart Clarke's method of hardening the brain for section is probably the best. It requires, however, care, time, and some experience. It consists essentially in dividing the fresh brain into moderate-sized fragments, and placing it for twenty-four hours in a half-and-half mixture of alcohol and water, then removing it for another twenty-four hours to pure alcohol, and then macerating it in a dilute straw-yellow solution of chromic acid or bichromate of potash (containing about one part to 200 of water) for some weeks, until by occasional trials it is found to be firm enough to bear cutting with a sharp razor. If kept too long or in too strong a solution, the brain-substance becomes friable, and good sections cannot be made. When made, the razor should be dipped in alcohol, and the section gently floated off in that fluid. It can be rendered transparent with turpentine.

L.S.A.—The use of the title on the strength of such a qualification is probably not illegal; but it would not command the respect of the profession. Consultation fees are regarded as *honoraria*, not to be recovered by processes of law. Any qualified medical man called into consultation is entitled to them.

SERVANTS AND SMALL-POX.

IN the little village of Swalwell, near Newcastle, of five new cases of small-pox, two were imported from a distance. Humane masters and mistresses would act consistently in asking themselves whether they should remove servants to their parents' homes, to increase the risks of spreading contagion.

Mrs. B. Buckley.—Our correspondent should complain to the surgeon in question. The course suggested would not have been commendable, for the patient would have suffered.

Fusbos.—A surgeon without some medical qualification cannot recover for medical services. He may hold a Club appointment if the members so please.

CARBOLISED GLYCERINE LINT AS AN ANTISEPTIC DRESSING: RAPID RECOVERY FROM A SEVERE SCALP WOUND.

To the Editor of THE LANCET.

SIR,—Allow me to call the attention of the profession to the above, specially prepared by Mr. W. B. Robinson, of Wheatbridge Factory, near this town, who is well known for the excellent quality of his lint and its comparative cheapness. I have found it very useful in cases of wounds, burns, compound fractures, and as a dressing to the stump after amputations. Its chief merit is that it is convenient, and saves time and trouble. The roll of lint can be kept covered with gutta-percha tissue, which will prevent the evaporation of the carbolic acid.

A railway guard was lately admitted into the Chesterfield Hospital with a very severe scalp wound extending across the forehead almost from ear to ear, the flap falling down on the face, and presenting a formidable appearance. Metallic sutures were employed, and the above dressing applied. The wound healed rapidly by the first intention.

I could send other cases in detail, but it is unnecessary.

I am, Sir, yours faithfully,
Chesterfield, June 17th, 1871. JOHN ROSE, M.D.

THE SURREY COMMONS.

WE trust the report is correct that the dispute with the Lord of the Manor touching the rights of the public over Wimbledon Common has been settled satisfactorily. It would be equally gratifying to be assured of the truth of the announcement that no further encroachment on the Common rights at Wandsworth will be made. Much ill-feeling has been generated by contests which should never have been provoked, and a debt of gratitude is due to those gentlemen who, at considerable personal sacrifice, have persistently fought the battle of the public in respect of these Commons. Tooting Common is, it is said, to be converted into a public park, and thus three open spaces on the margin of London will have been preserved from the insatiable maw of metropolitan builders.

TREATMENT OF GONORRHŒA AND GLEET BY INJECTIONS OF PERMANGANATE OF POTASH.

To the Editor of THE LANCET.

SIR,—If you think the following case of interest to the readers of your journal, I shall feel obliged by its insertion.

William J——, aged twenty-three, able-bodied, H.M. C.G.C. *Imogene*, was admitted into the Royal Naval Hospital, Haulbowline, on the 13th of April, suffering from gonorrhœa. The case is not an acute one, but the discharge is pretty profuse; has had little pain or chordee. The disease is of a week's duration. Has also got scabies. Ordered saline mixture with antimony for the first day.

April 14th.—Injection of permanganate of potash, five grains to the ounce, twice.

15th.—Discharge less; no pain. Repeat injection.

16th.—Discharge occasional; no pain. Repeat injection with eight grains to the ounce, three times.

17th.—Almost no discharge; what there is is quite clear. Repeat injection.

18th.—Perfectly dry. Injection repeated twice to make certain. Patient retained in hospital for the cure of the scabies.

Yours obediently,
Haulbowline, April 18th, 1871. THOS. WARDEN, M.D., R.N.

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Glasgow Herald, Borough Gazette, Birmingham Morning News, Waterford Chronicle, Birmingham Daily Gazette, Northern Echo, Isle of Man Times, South London Press, Derby Advertiser, Epsomian, Parochial Critic, and *Barrow Daily Times* have been received.

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